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DEPARTMENT OF THE INTERIOR
BUREAU OF EDUCATION

BULLETIN, 1919, No. 35

THE JUNIOR COLLEGE

By

F. M. McDOWELL
GRACELAND COLLEGE, LAMONA, IOWA



WASHINGTON
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1919

BULLETIN OF THE BUREAU OF EDUCATION FOR 1919.

- No. 1. Monthly record of current educational publications, January, 1919.
2. Standardization of medical inspection facilities. J. H. Bortowitz.
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30. The American spirit in education. C. R. Mann.
31. Summer schools in 1918.
32. Monthly record of current educational publications—Index, February, 1918-January, 1919.
33. Girl Scouts as an educational force. Juliette Low.
34. Monthly record of current educational publications, May, 1919.
35. The junior college. F. M. McDowell.
36. Education in Italy. Walter A. Montgomery.
37. Educational changes in Russia. Theresa Bush.
38. Education in Switzerland, 1914-1918. Peter H. Pearson.
39. Training little children.
40. Work of the Bureau of Education for the natives of Alaska, 1917-18.
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45. North central accredited secondary schools. Calvin O. Davis.
46. Bibliography of home economics. Carrie Alberta Lyford.
47. Private commercial and business schools, 1917-18.
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49. Education in parts of the British Empire.

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4. The writer has been closely connected with the work of small colleges for a number of years both as a student and teacher. One entire year was devoted to an investigation of the problems peculiar to that type of institution. For the past five years he has been intimately connected with the organization and administration of a junior college. During that time every effort was made to keep in touch with the work of this institution from every angle. Personal visits and correspondence with other junior colleges have frequently been resorted to. This experience has served as a constant source of reference throughout this investigation.

5. To supplement this general information and personal experience, resort was had to the much-abused questionnaire method. Recognizing the weaknesses of this method, the writer has constantly guarded against any extreme interpretation of the results, and at times has refused to state any conclusion at all when the basis for such could only be found in manifestly unreliable returns.

In all, five different questionnaires were used. The first (Appendix A) was mailed by the Bureau of Education to 218 institutions. Some of these were known to be junior colleges, but a larger number were unclassified institutions the exact status of which was not known. This, no doubt, accounts for the relatively small per cent of replies. Of the 90 institutions which did reply, 14 stated that they could not properly be classified as junior colleges. The remaining 76 filled out the questionnaire more or less accurately. It is probable that this number represents 60 or 70 per cent of the well-established junior colleges in the United States at present.

The second form (Appendix B) was mailed by the substation of the Bureau of Education at the State University of Iowa to 60 of the leading colleges and universities of the country. Replies were received from 49 institutions, representing 40 States.

The third form (Appendix C) was mailed by the substation of the Bureau of Education at the State University of Iowa to the State superintendents of public instruction of each of the 48 States. Replies were received from 36 of these. It should be noted that, in combining the return of the last two questionnaires, every State in the Union is represented by at least one reply.

The remaining two blanks were used in collecting data from some of the standard colleges and universities in regard to the training, experience, and work of those who instruct freshman and sophomore classes. The first of these (Appendix D) was distributed among the instructors of the University of Iowa. Of the 74 who were offering instruction to first and second year students, 69 returned the questionnaire.

A similar form (Appendix E) was used in collecting data from the following institutions:

1. The State University of Illinois. In this case 135 questionnaires were mailed and 90 replies were received. This represents about 66 per cent of those instructing freshmen and sophomore students in this institution.

2. The University of Minnesota. Of the 110 questionnaires mailed to the instructors of this institution about 60 per cent were returned.

3. Cornell College. Questionnaires were distributed personally to 20 instructors, 16 of whom furnished the desired data.

4. Coe College. Questionnaires were distributed personally to 20 instructors, 16 of whom furnished the desired data.

5. Grinnell College. In this institution the registrar took charge of the work of distributing the questionnaires. Replies were received from 26 instructors, or about 63 per cent of those instructing first and second year students.

There are two probable sources of error in the results of these last questionnaires. In the first place, a considerable number of the instructors of each institution failed to reply. In no case, however, did this amount to more than 40 per cent of the total. In three cases it was 20 per cent or less. In the second place, conditions this year are abnormal on account of the war.

Many of the regular faculty of these institutions are in war service. This has necessitated many changes in programs, the combining of classes, etc., all which have no doubt affected the results. In several instances those replying to the questionnaires have called attention to these conditions. With these facts in mind, the writer has constantly guarded against any extreme interpretation of the results. At all events, we may presume that the war has affected all of the institutions alike and that conditions in the junior colleges are also more or less upset. On this point the reader is left to judge for himself.

Chapter II.

ORIGIN AND EARLY DEVELOPMENT OF THE JUNIOR COLLEGE.

For more than 30 years there has been, in the United States, a gradual evolution of the idea that the first and second years of the standard college or university are distinctly secondary in character, differing alike in purpose, content, and organization from the later years of the period of higher education. To this period of two years, whether attached to the high school or left with the university, the name "junior college" has been applied and at present, in a number of States, seems quite generally accepted.

The suggestion of an extended period of secondary education no doubt comes from Europe. Since the days of John Sturm, at Strassburg, one may find secondary schools offering courses in secondary training which are 9 or 10 years in length. The present German gymnasium and the French lycée are typical of this class of institutions. Not only do they cover the later years of what we call elementary education, but they include an equivalent of the first two years of the American college as well. Graduates of the European secondary school, although no older than the graduates of our high schools, are two years in advance of the latter in scholastic training. Reference will be made to this point in a later chapter.

Although the evidences of the movement appear distinctly, it seems difficult to determine just when or where the idea was first suggested in the United States. We are told that Henry P. Tappan, in his first inaugural address as president of the University of Michigan in 1852, suggested the advisability of the transfer of the work of the secondary departments of the university to the high schools.¹

Likewise Col. Folwell, at the outset of his career as president of the University of Minnesota, suggested that ultimately the secondary schools of the larger centers might well undertake the work of the freshmen and sophomore years of the university.²

In the early eighties President James made an unsuccessful attempt to interest the authorities of the University of Pennsylvania in this plan.³

¹ Gray, A. A. *The Junior College*, p. 2. Quotes Hinsdale's *History of University of Michigan*, p. 43.

² Hill, A. Ross. *Proc. Nat. Assoc. of Universities*, vol. 13, 1915, pp. 122-143.

³ Brush, H. R. *School and Society*, vol. 4, Sept. 2, 1916, pp. 357-365.

Since there appear to have been no immediate changes following these suggestions, we shall pass them as of historic interest only.

The first official recognition of the distinction between the early and later years of university work that we have record of is that at the University of Michigan in 1883. In that year there was introduced in the liberal arts department of the university what was known as the "university system." Under this regulation a student was required to choose by the beginning of his junior year one major and two minor subjects, and to submit himself a year and a half or two years later to a final examination over all of the ground covered. This examination was set by a committee of three representing his major and two minor subjects.¹

This plan seems to have been abandoned a few years later, chiefly on account of administrative difficulties. We are told, however, that this institution agreed to accept work done above the twelfth grade in the better high schools of the State at full credit and that in the early nineties students were graduated in three years after doing the first year's work in a standard high school.²

Of far greater influence upon educational practice was the work of President Harper, of the University of Chicago. In fact we might well call that far-seeing educator the father of the junior college, for it is of him that the average individual thinks when the origin of that institution is mentioned.

When the University of Chicago opened its doors on October 1, 1892, William Rainey Harper became its first president. Under his influence the work of the freshman and sophomore years was given a distinct division of its own called the "Academic college." The work of the junior and senior years was combined into what was known as the "University college." Four years later, in 1896, these divisions were designated as "junior college" and "senior college," respectively.³

This distinction still exists, and has later been adopted by other universities.

This reorganization of the university was, however, only a beginning of President Harper's plan. From that point his influence was felt logically in two directions; in the high schools and in the small colleges scattered throughout the country. Though each of these problems will be given a separate chapter later, they will be discussed at this point, for out of them have developed two distinct types of junior colleges as we find them to-day.

¹ Lange, A. F. *Sierra Educational News*, June, 1909.

² *Ibid.*

³ *Catalogues of University of Chicago*, 1892-93 and 1896-97.

There can be no doubt as to President Harper's view in regard to the relation of the first two years of university work to the high school. He says:¹

The work of the freshman and sophomore years is only a continuation of the academy or high-school work. It is a continuation not only in subject matter studied, but in methods employed. It is not until the end of the sophomore year that the university methods of instruction may be employed to advantage. * * * At present this constructive period of preparation, covering six years, is broken at the end of the fourth year, and the student finds himself adrift. He has not reached a point when work in any preparatory subjects is finished.

For him this view was more than theory, for he made every effort to put in operation some plan of organization that would recognize these essential facts. In 1902, at the annual meeting of the schools affiliated with the University of Chicago, the opportunity presented itself. As chairman of that meeting he recommended that a committee be appointed to study the entire educational system with a view to the adoption of the following plan:²

1. The connecting of the work of the eighth grades of the elementary school with that of the secondary schools.
2. The extension of the work of the secondary schools to include the first two years of college work.
3. The reduction of the work of these seven years thus grouped together to six years.
4. To make it possible for the best class of students to do the work in five years.

One year later, at the seventeenth annual conference of the "Academies and High Schools Affiliating or Cooperating with the University of Chicago," the committee presented a majority report in favor of the extension of the high-school study to include two additional years. Another committee, representing seven large universities, also reported favorably on the plan.³

There can be little doubt that President Harper was thoroughly convinced of the wisdom of this move. Addressing the meeting of 1903, he said:⁴

Ten years from now the high schools all over the country will have added a fifth and a sixth year and will be doing college work which now falls to the first two years of the college courses. In Minnesota and Michigan the State universities are accepting work done in many of the high schools for the first year of college study. I have no doubt that the high schools are going to do college work in the future.

Although more than 10 years have passed, it can hardly be said that the movement has gone as far as President Harper hoped. Nevertheless, his prophecy is being fulfilled at present in some sections of the country with amazing rapidity. A glance at the table presented in a later chapter will show the truth of this statement. That the high school may safely be intrusted with the first two years of college work seems to have been demonstrated by at least one institution

¹ Harper, W. R. *The Trend in Higher Education*, p. 378.

² Harper, W. R. *Sch. Rev.*, vol. 12, p. 15.

³ Harper, W. R. *Sch. Rev.*, vol. 11, p. 1.

⁴ *Rep. Commis. of Educ.*, 1903, p. 573.

(Joliet High School, organized junior college department, 1902), which under the direct influence and encouragement of President Harper added two years to its regular course. Later chapters will present many evidences of the permanency of this change.

A second direction of the influence of President Harper, as far as it concerns us here, was that relating to the small colleges. In 1900 in an address before the National Education Association he said: ¹

In my opinion the two most serious problems of education requiring solution within the next quarter century are, first, the problem of the rural schools, which falls within the domain of lower education; and secondly, the problem of the small college, which lies within the domain of higher education. The second problem is at the same time serious and delicate, because the greatest interests, both material and spiritual, are at stake.

That the years since the utterance of this statement have found the problem of the small college to be both serious and delicate, no student of higher education will question. This fact will be discussed in a later chapter. The point of interest for us here is the remedy which that great educator suggested. Discussing the struggle through which the small college has risen, he said: ²

While, therefore, 25 per cent of the small colleges now conducted will survive and be all the stronger for the struggle through which they have passed, another 25 per cent will yield to the inevitable, and one by one take a place in the system of educational work which, though in a sense lower, is in a true sense higher. Another group (50 per cent) of these smaller institutions will come to be known as "junior colleges." There are at least 200 colleges in the United States in which this change would be desirable.

Again President Harper did not stop with theory. With all his energy and enthusiasm, and with ample funds at his disposal, he set about to induce several such struggling colleges to affiliate with the University of Chicago, and limit their course to two years beyond their regular academy work. The arrangement was then made whereby the student upon graduating from such an institution was permitted to enter the junior year of the university without examination. Although this plan (with few exceptions) did not meet with favor at the time, it is interesting to note that it is substantially the arrangement that is being made by several of the State universities at present (notably Missouri) and is being eagerly accepted by smaller institutions. In fact it may be more truthfully said that the smaller institutions themselves are now often taking the lead in bringing about this adjustment.

In 1892, independent of the work of the University of Chicago, but influenced by what Dr. Lange calls a "beneficently potent bacillus" coming from the University of Michigan, a committee of

¹ Harper, W. R. *The Trend in Higher Education*, p. 349.

² *Ibid.*, p. 378.

the University of California reorganized the cultural courses of that institution with the following features:¹

1. The retention of the traditional framework of the four-year college course leading to a bachelor's degree.

2. The recognition of the middle of this course as a suitable point for turning from cultural to professional aims, since the work of the first two years was in reality a continuation of the secondary educational and the work of the last two years could be connected without a break over into the strictly professional.

Another committee reported in 1903 a further development of the plan of 1892. It provided—

1. For greater freedom in dovetailing the upper end of the four-year course with the lower end of professional courses.

2. For a more definite, sharply marked separation of the last two years, upper division, from the first two years, lower division.

3. For a junior certificate to be given on the completion of six years of combined high school and college work to serve as an admission card to the upper division.

This arrangement was made deliberately with a view to promoting a unified six-year course, to unstiffening the barrier between the twelfth and thirteenth grades, and to facilitating transfer from one group to another according to students change of purpose.²

In 1907 another committee worked out a junior certificate for technical courses as well as cultural, further emphasizing the unity of the six years of secondary education. The same year the State legislature passed an act enabling high-school districts to add two years to the traditional four-year course. In 1910 Fresno became the first high school to avail itself of this opportunity. By 1914 there were 10 and at the present time there are more than 20 of such extensions. We shall review later in greater detail some of the factors influencing this development, but it may be said here that in the minds of its promoters in California at least, the junior college is here to stay.

There is ample evidence that there appeared in the minds of many educators at an early date the suggestion of the junior college as a means to the solution of the problems of the articulation of the high school with the college and university. In 1896 President Jesse, of the University of Missouri, in an address before the North Central Association of Colleges and Secondary Schools, said:³

The first two years in college are really secondary in character. I always think of the high school and academy as covering the lower secondary period, and the fresh-

¹ Lange, A. F. The Unification of Our School System. *Sierra Educational News*, vol. 5, June 9-14, p. 99.

² *Ibid*, June, 1909.

³ Jesse, R. R. *Proc. N. Cen. Assoc. of Colleges*.

man and sophomore years at college as covering the upper secondary period. In the secondary period and in at least the first two years at college not only are the studies almost identical, but the character of teaching is the same.

At this same meeting President Draper, of the University of Illinois, said, in discussing President Jesse's address: ¹

We can not tell just where the high-school course is to end and the college course commence. We all believe that they are continuous and ought to be uninterrupted. The different circumstances of different communities will have much to do with fixing the point where the high-school course shall stop and the college course begin. That point will be advanced higher and still higher as communities grow in size and increase in knowledge, in culture, in means, and in all the instrumentalities for educational development and progress.

Such are the beginnings of the junior college idea. In later chapters we shall consider the different types of the institutions as they present themselves at present. In each case there will be a further more critical discussion of the potent influences operating to give rise to that peculiar type of institution. Following this there will be a detailed consideration of the present status of these institutions; their location, character, quality of instruction, and methods of accrediting.

¹ Draper. Proc. N. Cen. Assoc. of Colleges and Sec. Schs., 1896, p. 789.

Chapter III.

INFLUENCES TENDING TO FURTHER THE DEVELOPMENT OF THE JUNIOR COLLEGE IDEA.

In the preceding chapter there was presented a brief discussion of the origin and early development of the junior college idea. It remains now to consider at some length those influences which have tended to further the development of this idea. For the purposes of this discussion, these influences have been grouped under the following general heads:

1. Those coming from within the university.
2. Those coming from within the normal school.
3. The demand for an extended high school.
4. The problem of the small college.

It is of interest to note that these four lines of influences which have resulted in the development of the junior college may serve also to explain the four rather distinct types of junior college with which we are familiar to-day. These are:

1. the "lower division" of junior college within the university.
2. The normal school accredited for two years of college work.
3. The public junior college.
4. The private junior college.

It is not the purpose here to discuss these various types. The chief concern in this chapter is to make clear by means of a somewhat detailed analysis those factors and influences which have contributed directly to the development of the junior college idea as a whole as well as to the peculiar types of junior college above mentioned.

1. INFLUENCES COMING FROM WITHIN THE UNIVERSITY.

The university must be held responsible for the first suggestion of the junior college idea in the United States. More particularly must this responsibility and perhaps honor go to the University of Michigan, where the idea was perhaps for the first time officially recognized. From the university also comes the first practical demonstration in an administrative way of the possibilities of the new plan. Credit for this is probably to be divided equally between the Universities of Chicago and of California. But this is not all. In nearly every State where the junior college movement has made any significant progress, it has followed in the wake of university influence. Witness the situation in California, Illinois, Missouri, Minnesota, and Texas as evidence of this assertion.

These facts are significant, and one is led immediately to ask the question Why are these things so? In the attempt to answer this question the leaders in this movement are left, so far as possible, to speak for themselves. For convenience in discussion the answer will be given under the following headings:

1. The rapid growth of the university within recent years.
2. The conviction of the need of a wiser division of university and secondary work.
3. Other administrative advantages.

1. THE RAPID GROWTH OF THE UNIVERSITY WITHIN RECENT YEARS.

The population of the United States increased $4\frac{1}{2}$ times between 1830 and 1890. During the same period the number of colleges and university students increased 10 times.¹

Gray, writing in 1915, says: ²

During the last 20 years Columbia has grown 11 times as great in student enrollment, Illinois 9 times, Michigan and Wisconsin 4 times, California 6 times, Ohio 5 times, and Missouri 8 times. * * * In 10 American institutions, of which 7 are State, the enrollment has gone beyond the 5,000 mark, California leading all State institutions with an enrollment in 1914 of 8,699. Twelve of the largest institutions in the United States have doubled their enrollment in the last decade and are still rapidly increasing.

During the decade from 1903 to 1913 the total enrollment in 30 of our leading universities increased from 67,000 to 113,000, or 68 per cent, as compared with an increase in population of but 21 per cent during the same period.³

This rapid increase in enrollment has involved the university in many administrative difficulties, not least of which is the task of providing for the needs of the large groups of students enrolled in the first and second year classes. Gray, who has recently made an investigation of this phase of the problem, says: ⁴

In a president's report of a great State institution for 1913 attention is called to the size of many of the classes. The freshman class for 1913 numbered 1,477, and during the first semester there were 27 freshman and sophomore classes having each more than 150 students and 9 classes having over 350 students each. The number of freshmen in history was 637; elementary economics, 480; in women's hygiene, 571; in men's hygiene, 888; and in chemistry, 687. In the two latter classes a division was made requiring a repetition of the lecture of the instructor, "as if such a repetition were a thing to be deplored." Imagine a freshman class of 444, a pitiable sight, one to make the very gods weep. In the report it was stated that "it would be short-sighted to plan a laboratory with a capacity less than a thousand."

This situation has led many university authorities to support the junior college, which they claim would not only relieve the university

¹ Avery, Sam. Nat. Ed. Assoc., 1912, p. 784.

² Gray, A. A. The Junior College, pp. 96-97.

³ Independent, Feb., 1914, p. 221.

⁴ Gray: The Junior College, p. 96.

from the tremendous expense of caring for these large beginning classes, but would also insure better work and more personal attention for these students when such is especially desirable.

2. THE CONVICTION OF THE NEED OF A WISER DIVISION OF UNIVERSITY AND SECONDARY SCHOOL WORK.

University authorities have supported the junior college because of a firm conviction that there is need of a better and wiser division of work between the secondary school and the university. The extension of the high-school course, they claim, will but serve to give to that institution what rightfully belongs to it, and at the same time will relieve the university of a large amount of secondary school work, all of which will lead to a more efficient and economical scheme of public education. Consider the following statements of the leading advocates of the junior college:

President Harper said nearly 20 years ago: ¹

The work of the freshman and sophomore years is only a continuation of the academy or high-school work. It is a continuation not only in subject matter but in methods employed. It is not until the end of the sophomore year that the university methods of instruction may be employed to advantage. At present this consecutive period of preparation, covering six years, is broken at the end of the fourth year, and the student finds himself adrift. A great waste of time, energy, and interest follows this unnatural break in the prosecution of the student's work.

President Judson, of the same university, said in his report of 1911-12: ²

Attention is invited to the situation in the curricula of the colleges. An investigation of this subject shows plainly that from 20 to 30 per cent of the work required in the four-year college is in content and essentially in mode of treatment merely high-school work. In other words, we require the student in order to enter one of the colleges to have spent four years in a good high school, and then, not satisfied with that, we require him before taking serious college work to spend at least a year more in high-school training.

Obviously this leads to the question as to what is the distinction, if any, between work properly adapted to the high school and work better adapted to the college. Is not almost every subject taught in colleges also made a part of the high-school curriculum?

President David Starr Jordan, in 1912, thus expressed his views: ³

I am looking forward, as you know, to the time when the large high schools of the State, in conjunction with the small colleges, will relieve the two great universities from the expense and from the necessity of giving instruction of the first two university years. The instruction of these two years is of necessity elementary and of the same general nature as the work of the high school itself. It is not desirable for a university to have more than about 2,000 students gathered together in one place, and when the number comes to exceed that figure, then some division is desirable. The only reasonable division is that which will take away students who do not need libraries or laboratories for their work.

¹ Harper, W. R. *The Trend in Higher Education*, p. 378.

² In Johnston's *Modern High School*, p. 837.

³ *Ibid.*, p. 832.

Dean Lange, of the University of California, perhaps the leading authority on the junior college at present, thus sums up the reasons why that institution has been led to support the junior college:¹

Since 1892 the university has been gradually reshaping itself around two organizing ideas. One was that for theoretical and practical considerations alike, the university proper should begin in the middle of the inherited four-year college scheme; the second was and is that the work of the first two years is as a matter of history and fact all a piece of secondary education. This trend of thought and preaching and practice has resulted gradatim in the junior certificate to mark the distinction between university and secondary education, in the policy of placing all professional schools on the basis of not less than two years of nonprofessional training, in making the studies of the last two years of the high school and the first two years of the college largely interchangeable, and, last but not least, in publicly exhibiting the requirements for the junior certificate in terms of unified six-year curricula.

Many other authorities might be cited, but certainly enough has been given to show beyond a doubt that the leading university men of our time have supported the junior college because they have seen in it the opportunity for a reajustment of our present system of education along more practical and efficient lines.

3. OTHER ADMINISTRATIVE ADVANTAGES.

One of the most significant discussions of the administrative advantages of the junior college from the standpoint of the university comes from Columbia University. Surprising as it may seem, this new idea has even penetrated the conservative East.

In his annual report for 1916-17, President Butler strongly recommends the organization of a junior college as a part of the general administrative plan of Columbia University. His reasons are so significant that it will be worth while to review them briefly.

It is pointed out that, with the rapid increase in the enrollment of Columbia College, it has become increasingly difficult for the officers to keep in personal touch with the individual students. Moreover, it is found that there are enrolled two quite distinct classes of students. In the first place there are some that intend to spend three or four years in pursuit of what is called the "liberal and elegant" studies. On the other hand are those, rapidly increasing in number, who enter Columbia College with the definite purpose in mind of meeting the entrance requirements to professional schools as soon as possible. As a result of this division of interest and enrollment, President Butler suggests that the time has come when there might be established in the university a junior college, separate from Columbia College, designed especially for the care and direction of those students who are definitely preparing themselves for professional studies from the time of college entrance, and wish to enter upon those studies with the least possible delay.

¹ Lange, A. E. Bul. of Univ. of Calif., July, 1915.

It is further emphasized that under present conditions the interests of either one group or the other are necessarily sacrificed. Furthermore, the attempt to meet the many-sided needs of a university forces a division of attention which threatens the traditional policy and purpose of the institution. In conclusion President Butler says:¹

The suggestion for the establishment of a junior college is offered as an easy and practical way of meeting the very real difficulties that have arisen in Columbia College owing to its size and diversity of interest and aim among its students, as well as a means of sharpening and defining the place of the historic Columbia College in the Columbia University of to-day and to-morrow.

2. INFLUENCES COMING FROM WITHIN THE NORMAL SCHOOL.

During the past two decades there has been a marked tendency on the part of normal schools to become colleges, or at least to undertake a large amount of college work. Gray cites the following institutions as examples of those making this change:² Michigan State Normal College (1897), Montana State Normal College (1903), Chicago Normal School (1903), Michigan State Teachers' College (1903), Colorado State Teachers' College (1909), Iowa State Teachers' College (1909), Illinois State Normal University (1907), Albany Normal College.

This tendency is not limited to any particular territory or to any size of institution. Gray found examples of the change in 13 States, scattered from Montana to New York. Information collected during the course of this investigation shows that in at least 8 States normal schools have been accredited for college work, and that in a number of cases the amount of college work offered was limited to two years.

It is not within the purpose of this investigation to discuss the merits of this change. Recent educational literature is replete with articles dealing with the pros and cons of this question. Interest here centers in the cause of this development, and more especially in its effect upon the junior college movement.

Perhaps the most significant reason for this tendency of normal schools to become colleges has been the ambition on the part of the officials of these institutions to keep pace with the times by providing for the professional training of teachers for all grades of public-school work. As this would include the preparation of high-school as well as elementary-school teachers, the need of offering college courses was apparent. The following are typical of the many arguments made in support of this view. David Felmley says:³

The expansion of the normal school has been occasioned by its legal duty to develop its courses to meet the needs of the public school system. High-school teachers should be trained in the same environment as elementary teachers. They need the

¹ Butler, N. M. An. Rep., 1916-17.

² Gray, A. A. The Junior College, p. 58.

³ Felmley, David. Ed. Rev., 25, pp. 409-415.

same love of children, the same knowledge of the problems of childhood. To train them in a separate school with different standards and ideals would result in a serious break in spirit, methods, and character of work, as the child passes to the high school. Accordingly, many normal schools in the Middle West are providing programmes four years in length for high-school teachers.

J. W. Crabtree, in discussing this problem before the 1917 meeting of the National Education Association, said:¹

The normal school was established for the purpose of training men and women for efficient teaching in the public schools. Its purpose was not to train only a portion of the teachers, leaving the training of the other teachers to other agencies, but its purpose was to train the teachers for all teaching positions in all the public schools. I see no reason why this purpose should be changed.

At this same meeting J. G. Crabbe outlined what he called a "Declaration of Principles for Normal Schools." He said in part:²

The twentieth century normal school is dedicated to higher education, with the special function of supplying teachers for rural schools, the elementary schools, and the high schools. It will extend its course of instruction and practice, as conditions may demand, to four-year courses, thus giving as high a standing in the way of discipline and scholarship as the college now possesses.

Acting on this ambition, a number of normal schools have become colleges or universities in name at least. Others, perhaps a little less ambitious, have been content to offer varying amounts of college work as a part of their regular teacher-training courses, though still claiming to be normal schools. In either case the result was inevitable. Students taking this advanced work were sure, sooner or later, to ask to receive credit for such work in larger colleges and universities. On the other hand, the latter institutions were just as sure to establish some standards to serve as a basis for such accrediting. This is what has actually happened in a number of the States.

But one step more was necessary to make the school a junior college. The practice among State universities has been to credit certain normal schools of their respective States for the amount of college work offered under certain conditions. For various reasons, the most important of which will be emphasized from time to time throughout this discussion, the tendency has been to limit the college work offered to two years above the standard high-school course. When such a plan is standardized, these institutions become essentially junior colleges.

This blending of the junior-college movement with that of the upward extension of the normal school is perhaps best illustrated by the situation in Wisconsin. The people of this State demanded better opportunities for securing the early part of a college education, near home and at less expense. In response to this demand, as well as

¹ Crabtree, J. W. Proc. Nat. Ed. Assoc., 1917, pp. 403-404.

² Crabbe, J. G. Proc. Nat. Ed. Assoc., pp. 385-388.

to that of ambitious normal-school officials, the State legislature passed in 1911 the following act making it possible for normal schools to give two years of college work:

The board of normal-school regents may extend the course of instruction in any normal school so that any course the admission to which is based upon graduation from an accredited high school or its equivalent may include the substantial equivalent given in the first two years of the college course. Such course of instruction shall not be extended further than the substantial equivalent of the instruction given in the first two years of such college course without consent of the legislature.¹

In addition to Wisconsin, the following States have recognized the college work given in normal schools upon essentially the same basis as that given in public and private junior colleges: Arizona, Indiana, Michigan, Minnesota, Nebraska, North Dakota, Oklahoma, Utah, and West Virginia. The State board of examiners of Iowa has put normal schools and junior colleges in the same class by granting the third-grade State certificate to graduates of both institutions who have taken certain courses in education.

3. THE DEMAND FOR AN EXTENDED HIGH SCHOOL.

The junior college in its present form involves a fundamental change in our traditional institution of secondary education—the high school. We have already considered at some length those factors which have been operative within the university and normal school in the encouragement of the junior-college idea. However important these influences may have been, it is undoubtedly true that the most significant aspect of this movement is to be found in the fact that it seems to be an additional step in the evolution of our system of public education. The junior college to-day is the result of the demand of an intelligent public that the opportunities for receiving a higher education be brought within the reach of all, just as the high school has been and is the result of such demands. There is every reason to believe that its roots lie deeply embedded in those forces which have made American public education what it is to-day. Prof. James R. Angell, in discussing this problem before the North Central Association of Colleges and Secondary Schools in 1915, said:²

It would in my judgment be a great mistake to view the movement as purely an administrative arrangement of our college work. The meaning of the matter seems to me to lie deeper than that. If I mistake not, it is a symptom simply, but one fraught with immense potential consequences, of a renaissance in communal interest in higher education, of which the first great wave gave us our State universities and our agricultural and engineering schools.

¹ The 1915 edition of the School Code of Wisconsin, p. 244.

² Angell. *The Junior College Movement in High Schools*. Sch. Rev., vol. 23, pp 289-302, May, 1915.

Dean A. F. Lange, of the University of California, one of the foremost authorities on the junior college and leader of the movement in his State, says: ¹

The rise and progress of the junior college must be regarded as an integral phase of the country-wide movement toward a more adequate State system of education, a system that shall function progressively so as to secure for the Nation the greatest efficiency of the greatest numbers.

The immediate problem here is to review briefly those forces which have been operative in effecting this significant change in the scheme of public education. It is hoped that thereby light will be shed upon the problems of organization and administration of the junior college as an integral part of the public-school system.

1. Historically there is little justification for believing that the traditional high-school course of four years is the best possible arrangement for secondary education. In so far as the limits of this period have been established, they have been of accidental rather than purposeful origin. In fact, any historical inquiry covering the theoretical field of secondary education would find itself overlapping at one time the higher grades of the elementary school and at another time the lower classes of the college. Brown says: ²

Historically the limits of secondary education are shadowy and variable. * * * In the course of its development the American secondary school has got wedged in between the elementary school and the college, each of which has developed independently without any such check or bar. So the education that we commonly call secondary covers a shorter period in this country than in the leading culture lands.

Another writer of no less prominence says: ³

Secondary education has never been adequately and acceptably defined. In our own country the views concerning secondary education as to its purpose, scope, curriculum, method, or organization are of the most diverse character, even among those who are specialists in this very field.

Inglis says: ⁴

The curriculum of the public high school has always transcended the requirements of subject matter set up by the colleges for admission and frequently has included subjects regularly included in the college curriculum. Likewise the college curriculum regularly includes subjects of study which are essentially of secondary grade. There has always been a certain amount of overlapping in the curricula of the secondary school and college. In the average high school it would not be at all difficult to map out a one or two year "postgraduate" course which would be quite comparable to possible freshman and sophomore courses in college.

It seems clear from these statements that, whenever social needs are such as to demand a change in the traditional conception of secondary education, that which is more or less an accidental product of history should not stand in the way.

¹ Lange, A. F. In bulletin on Junior College published by Univ. Calif., July, 1915.

² Brown, E. E. *The Making of Our Middle Schools*, p. 2.

³ Monroe: *Principles of Secondary Education*, p. 2.

⁴ Inglis: *Principles of Secondary Education*, p. 310.

2. Some have no doubt been influenced by the organization of secondary education that is found in the leading countries of Europe. In France, England, and Germany examples are found of the successful operation of closely connected and logically outlined courses covering from seven to nine years of what may be called secondary education. In these countries secondary education commences much earlier than in the United States and ends much later. Advocates of the junior high school in this country are emphasizing the earlier beginning of the period, while those who champion the junior college see in it the recognition of the value of continuing secondary education two more years. Everyone is familiar with the general organization of secondary education in Europe, and it need not be discussed in detail here. It may be said, however, that it contains many features that should commend themselves to the student of American education, and we may safely conclude that it is, at least, a significant suggestion of the possibilities of the junior college plan.

3. A more particular argument that is being advanced in favor of the extension of the high-school course by the organization of a junior college is that it provides opportunities for college work at home at less expense and under close supervision.

Whether justifiable or not, there is a widespread and sincere demand upon the part of parents and students alike that the opportunities for securing a higher education be brought within reach of all. Parents favor a home college because they feel that their boys and girls are still too immature to be safe in the freedom-loving atmosphere of a large institution. To many also the latter alternative is made impossible for financial reasons. A recent bulletin of the public schools of Santa Barbara, Calif., names four classes of students that patronize a local junior college: First, those who can not afford to live away from home; second, those who are too young and immature to cope with the problems of the large university; third, those who are slightly deficient in entrance requirements and need a little personal encouragement and guidance; fourth, those who do not intend to complete college work but desire certain additional studies.

There is every reason to believe that this demand, that higher education be brought within reach of all, is widespread. More than 90 per cent of the replies to the questionnaire mentioned this as one of the reasons for the establishment of a junior college, and 50 per cent mentioned it as the most important reason. If the replies of the 21 public junior colleges are considered separately, it will be found that this demand on the part of parents and students ranks first both in frequency of mention and in relative importance. (See Table 1, p. 28.)

The principal of the Kansas City Polytechnic Institute writes:

The dominant reason for the establishment of a junior college as a part of a system of public schools lies in the fact that the average graduate of the high school has not reached the maturity desirable for leaving home and entering the complex life of the larger university.

In this city the public actually forced the organization of the junior college by insisting that their children remain in high school for at least a fifth year. The standardization of this additional work naturally followed, and the result of this is the junior college. Almost identical examples of the same influences might be cited from a number of cities in Michigan, Minnesota, Illinois, and especially in California.

4. Closely allied to the foregoing reason, but of sufficient significance to deserve separate mention, is the demand for a junior college as a completion school for those who can not go further.

Says Prof. Lange:¹

In California the upward extension of the high school was urged in the educational interest of the great mass of high-school graduates, who can not, will not, should not, become university students. The controlling purpose was to provide a reasonably complete education, whether general or vocational.

It is an established fact that a large percentage of high-school graduates do not enter higher institutions. There is also evidence to show that many of these fail to do so largely because such institutions are not within their reach. The significance of this demand for the junior college as a completion school is shown by the fact that it ranks first over all both in frequency of mention and in importance in the replies of 77 institutions to the questionnaire. (See Appendix J.) Further evidence pointing in this same direction will be found in a later chapter, where the number of graduates from the junior colleges is compared with the number that enter higher institutions.

5. In many instances the junior college has appeared as a response to special local needs. Thirty-five institutions gave this as one of the reasons for their establishment. Fifty per cent of the public junior colleges replying included it in their answer. Principal William J. Bogan, of the Lane Technical School, of Chicago, writes:

It was believed by many citizens of Chicago that junior colleges should be encouraged in the city for the purpose of developing home talent that might be utilized in solving some of our city problems. They believed that every great industrial center like Chicago ought to work out many of its problems through its own trained citizens. It was believed that this great industrial city would serve as an industrial laboratory in which students might gain a knowledge of the industries by direct contact. After graduation our city boys, familiar with city conditions, trained in our city colleges, would be better than outsiders to solve our problems.

¹ Lange, A. F. In Univ. of Calif. Bul., July, 1915, p. 8.

President James, of the University of Illinois, one of the ardent advocates of the junior college, calls attention to the fact that the high schools thus extended could—

relieve State universities of much of the elementary extension service they are forced to render communities, such as water analysis, advice in sanitary and other forms of engineering, agriculture, and public health.¹

6. As already suggested, one phase of the local needs is the demand for certain vocational training that can not be furnished by the high schools. In a bulletin devoted entirely to the problem of the junior college, published by the University of California, we read:²

There is an increasingly imperative need of vocational training, first of all for those whose education for general social efficiency is not prolonged beyond the elementary school, and secondly for those whose general education ends with the four-year high-school period and who are not headed for one of the professions, in the restricted sense. For this latter class the junior college has much to offer.

More than 30 per cent of the junior colleges suggest vocational training of this sort as one of their aims, and a number of them, notably those in Chicago, Kansas City, Detroit, Los Angeles, and Sacramento, are now offering specific vocational courses, such as journalism.

7. Another factor that has tended to emphasize belief that the end of the sophomore year of college, rather than graduation from high school, marks the real end of secondary education, has been the increase in the entrance requirements of professional schools. According to MacLean,³ there were in 1904 only 3 medical schools in the United States that required more than high-school work for admission, while in 1913 there were 41. At present the American Medical Association specifies two years of college work as a minimum requirement for admission to all standard medical colleges.

Similar changes have been made by other professional institutions. As a consequence there is an increasing demand for some provision whereby the pre-professional training can be secured at home at a minimum expense. There is scarcely to be found a discussion of the junior college problem that does not mention this point. Fifteen of the institutions considered in this investigation mentioned this as an especially important reason for their establishment.

8. The establishment of a local college has been encouraged in some sections of the country by the geographical remoteness of the standard colleges and universities.

A. A. Gray says:⁴

One of the chief causes for the rapid growth of this new educational movement in California is the large size of the State and the great distance of the high schools from

¹ James, E. J. Quoted in Johnson's *Modern High School*, p. 834.

² Univ. Calif. Bul., July, 1915, p. 8.

³ MacLean, G. L. Bu. of Educ. Bul. No. 4, 1913.

⁴ Gray, A. A. *The Junior College*. Univ. Calif., master's thesis. Univ. Iowa library (unpublished).

the two large universities of the State. The fact that the majority of the junior colleges of the State are located in the southern part, from 300 to 500 miles away from the State university, shows the influence of distance in the establishment of these colleges.

The State of Idaho furnishes another example of the same condition. In that State there are a number of high schools located hundreds of miles away from the university. To offset this condition, the State legislature passed an act providing for a junior college at Pocatello. This institution was thereby put under State control, and the scope of its work limited to two years of standard college work. Similar conditions exist in Colorado and Texas. In the latter State a large number of junior colleges have recently been organized. More than 40 per cent of the public junior colleges replying to the questionnaire give this question of remoteness as one of the reasons for their organization.

9. Some have supported the junior colleges as a financial saving to the community. The principal of Grand Rapids (Mich.) High School estimates that it costs the parents of that city \$250,000 annually to send their children away from home to complete their education. Much of this he believes has been saved to the community by the establishment of a junior college. Gray estimates that the city of Los Angeles saves \$100,000 annually by keeping the 200 students enrolled in the junior college at home rather than sending them away to the university.

Evidence so far seems to show that a junior college can be supported at a cost per pupil very little in excess of the per capita cost of high-school pupils. Estimates furnished by several cities of California show a range of from \$80 to \$200 per capita cost to the city for each student in the junior college. Many call attention to the fact that this could be much reduced by larger enrollments.

This discussion of the reasons that have been given for the upper extension of the high school and the formation of junior colleges is evidently far from comprehensive. An attempt has been made to enumerate only some of the more important points, and the reader is left largely to determine the value of such for himself. For further material on the status of the junior college in connection with the high schools of the various States, attention is called to the succeeding chapter of this report, and also to the bibliography on page 136. It is hoped that enough has been said to indicate roughly those forces which have been operative in the establishment of the public junior college.

TABLE 1.—*Reasons for organizing junior colleges.*¹

Reasons.	Number.	Per cent.	Rank in frequency. ²	Rank in importance. ²
Geographical.....	9	42	5½	3
Financial.....	5	24	7½	4½
Desire of parents.....	20	95	1	1½
Desire of students.....	14	66	3	1½
Segregation of sexes.....	1	4.8	10½	11
Religious.....	1	4.8	10½	10
Vocational.....	5	24	7½	8
Teacher training.....	2	9.5	9	8
Professional.....	9	42	5½	8
Completion school.....	17	81	2	6
Local needs.....	10	48	4	4½

¹ A summary of the replies of 21 public junior colleges to question 13 on a questionnaire (see Appendix A).

² In the third column is given the rank in frequency of mention, while in the fourth column is given the rank in frequency of which each reason was underscored as especially important. The former is the more reliable measure, because it represents a larger number of replies.

**REASONS FOR THE ORGANIZATION OF PUBLIC JUNIOR COLLEGES,
RANKED IN ORDER OF IMPORTANCE AS DETERMINED BY THE FRE-
QUENCY OF MENTION.**

1. Desire of parents to keep children at home.
2. To provide a completion school for those who can not go further.
3. Desire of students to secure college work near home.
4. To meet specific local needs.
5. Geographical remoteness from a standard college or university.
6. To meet the entrance requirements of professional schools.
7. To provide vocational training more advanced than high-school work.
8. Financial difficulty in maintaining a four-year course.
9. To provide additional opportunities for teacher training.
10. To secure the segregation of sexes.
11. To provide opportunities for higher education under church control.

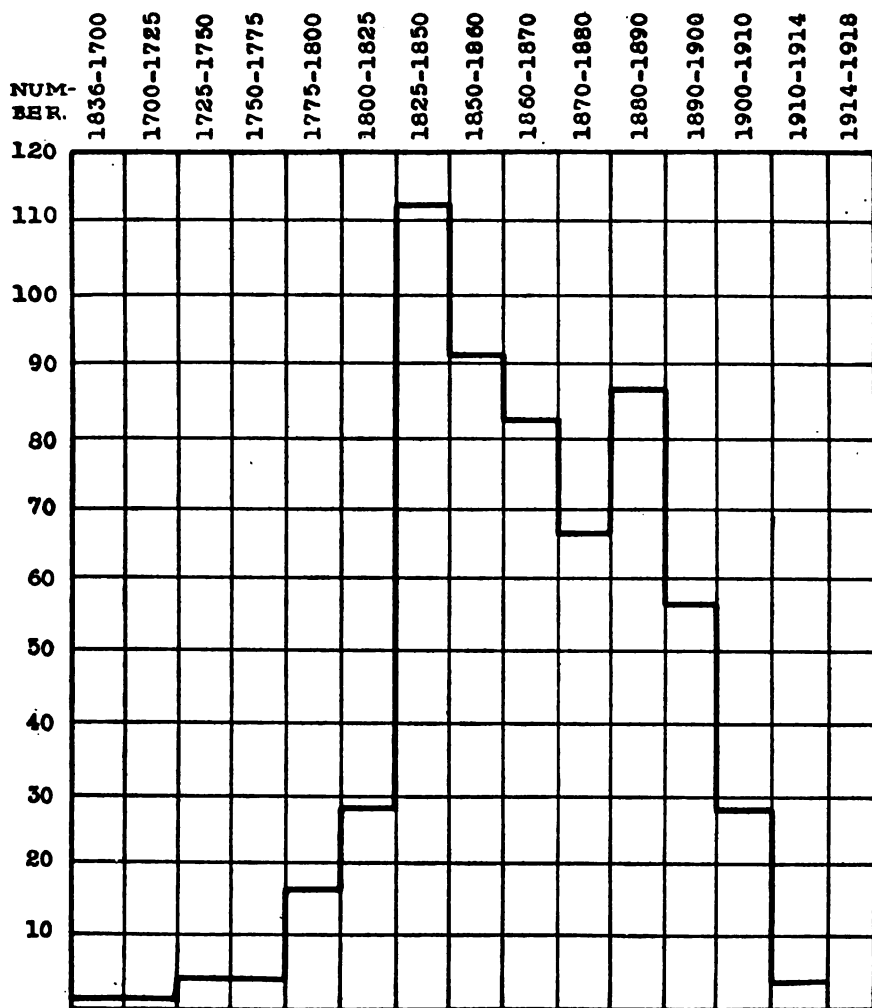
4. THE PROBLEM OF THE SMALL COLLEGE.

Probably what has been and will continue to be one of the most potent factors in the development of the junior college is the situation confronting the traditional small college to-day. So significant is this situation as it relates to the future development of higher education that it is believed profitable to glance briefly at the history of this American institution. The future of the college is made clear only by an understanding of its past, and a vision of both is essential if it is desired to see the junior college in its true light.

Throughout the history of higher education in the United States, the small college has been the typical institution. In 1850 there was not a college that enrolled more than 400 students. Even as late as 1902, according to the Commissioner of Education, 64.4 per

cent of the 596 colleges and universities had less than 400 students, and 312, or 52 per cent, had less than 300 students enrolled.

As an institution the American college is unique. Though perhaps similar at the time of its origin to certain European institutions, it has been so changed by the genius and originality of the American people that it no longer bears the marks of its ancestors. To-day



GRAPH I.—Number of colleges established during each of several periods of American history.

the hundreds of small colleges scattered from coast to coast stand as monuments to the American, the democratic, spirit in higher education.

No better evidence of this statement can be found than the rapid growth in number of these institutions. Graph I illustrates this

development clearly. According to this author, there were in the United States, in 1914, 567 colleges and universities. Of that number, 262 antedate the Civil War, while 305 have been established since that time. President Pritchett, of the Carnegie Foundation, in his investigations found nearly 1,000 institutions calling themselves colleges or universities which were doing work all the way from a four-year college course down to a very poor grade of high-school work.

This condition suggests that it is not the large number of these institutions which is so significant, but rather the lack of uniformity of standards. Up until the last few years any group of men could secure from the State a charter granting the right to organize a college of some kind, to grant such degrees as are usually conferred by such schools, and even to state the requirements necessary to obtain a degree. Under these conditions denominational, local, and personal rivalries have led to the establishment, especially in some States, of more colleges than can be properly supported.

The actual results of this laissez-faire policy can, perhaps, be better appreciated if we study at close range the conditions in various sections of the country. As has been said, the American people have liked the small college and have made every effort to have plenty of them. The example was first set by Ohio. According to Thompson,¹ it is a simple statement of fact that probably 300 institutions, more or less permanent in character, have organized for educational purposes in Ohio.

With the development of the West, the same spirit continued to express itself. To quote Gray:²

In recent years in the Far West, where the population is on the increase, usually one of the first "drawing cards" sought by a community is "a college." A typical example of this is found in southern Idaho, where the funds are now being gathered to start a denominational college in a community only six years old. Idaho already has a State university, a technical college, two denominational colleges, and two State normal schools; yet the entire population of the State is less than that of the city of San Francisco. Within a radius of about 100 miles of this proposed college there can not be found more than a score of small high schools, which graduated last year not more than 300 students qualified for college admission. Where this college expects to find its students it is difficult to see, when not one-fifth of the 300 will go to college at all.

In Oregon and California similar conditions are known to exist. Commissioner Claxton, in his report for 1912, thus describes the condition in the former State:³

Admirably as the history of Ohio and Kansas illustrates this sort of development, the Willamette Valley in Oregon will serve still better. There, in an area 120 miles long and 50 miles wide, in a State having a total population of 675,000, are found 12 colleges, including the State university, the agriculture and mechanical college, and

¹ Thompson, W. O. Ohio Centennial Celebration, 1903, p. 489.

² Gray, A. A. Univ. Calif. Thesis, 1915, p. 38.

³ Rep. Commis. of Educ., 1912, p. 105.

one clearly undenominational college; the rest represent nine denominations, while a tenth denomination has organized a junior college in another part of the State. One of these colleges, which belongs to a great church, was first opened nearly 50 years ago, yet last year its total registration of college students was only about 20. * * * In one of the "colleges" of this region, nearly half a century old, all the work in classroom, laboratory and museum, in physics, chemistry, biology and geology is carried on by one man in a single room of not more than 16 feet square.

A. A. Gray, of the University of California, in a recent report describes similar conditions existing in his own State, in a small area immediately surrounding Los Angeles.

Turning to the South, we find conditions even worse. According to Miss Colton, an authority on higher education in the Southern States:¹

There are in the South 380 institutions claiming to be colleges or universities, only 30 of which are recognized by the Association of Colleges and Secondary Schools. Thirty-five or forty others approximate the minimum requirements of a standard college; of the remaining 310, there are perhaps 50 or 60 that might improve their equipment, curriculum, and organization sufficiently to do two years of college work. In North Carolina, for instance, which is fairly typical of all Southern States in its superabundance of nominal colleges, there are 29 denominational colleges, distributed as follows: Episcopal, Moravian, Friends, 1 each; Christian and Reformed, 2 each; Lutheran and Roman Catholic, 3 each; Baptist and Presbyterian, 5 each; Methodist, 6; and yet only 1 of the whole 29 conforms to the minimum requirements of the Southern College Association.

Naturally, such a state of affairs led to a period of definition and standardization. The United States Bureau of Education, the Carnegie Foundation, the legislatures of the various States, the different churches and numerous educational associations, have all had a hand in this work. So thoroughly has this work been conducted that the Bureau of Education in a recent bulletin has deemed it necessary to classify all of these attempts in a form immediately serviceable to educational officers in general.²

A complete discussion of these standards would not be in place here. It may safely be said, however, that they approximate uniformity on many points. To be considered a standard college an institution should have a productive endowment of at least \$200,000. It should require for admission the completion of a standard four-year high-school course. It should have a faculty of college graduates with at least a year or more of graduate work. It should have ample material equipment in every way; buildings, libraries, and laboratories sufficient to assure high-grade work in a variety of scientific and cultural subjects, and it should specify and enforce certain minimum requirements for graduation.

Without further detail it will be evident to the reader that the application of these tests would result in the exclusion of a large

¹ Colton: The Junior College Problem in the South, *Merideth College Bul.*, 1915.

² *Bul. of Bu. of Educ.*, No. 17, 1917.

number of institutions. A few years ago the writer made an investigation of more than 200 small colleges representing nearly every State in the Union. According to data collected at that time, and as is shown by the Report of the Commissioner of Education for 1912, more than 50 per cent of these institutions failed to reach the minimum requirements for endowment of \$200,000, although this standard has been the one quite generally agreed upon. Of the total of 581 colleges listed in the commissioner's report for that year, 197 had less than this minimum requirement. Similar results were found when other parts of the standards were applied.

There is but one conclusion to this discussion thus far. The much-prized institution of American democracy, the small college, is facing a serious crisis. The constantly increasing tendency to enforce the standards already referred to threatens the very life of these institutions. Must they go?

Serious-minded educators have for almost a score of years been trying to answer this question. They see, on the one hand, the disastrous results of the policy above described, and are firmly convinced that such conditions can not be allowed to continue, yet, on the other hand, they recognize the work of these institutions. They know by what giving of life and blood this work has been made possible, and they know the spirit of the American people. They know that anything but an intelligent, broad-minded attempt to solve this problem would be unjust, and sooner or later bound to fail.

President Harper, of the University of Chicago, faced this problem squarely almost 20 years ago.¹

So thoroughly did he analyze the situation that the factors which he suggested as determining the future of the small college are for the most part equally valid to-day. In the first place, there are certain factors which seem to favor the development of the small colleges. Among these may be mentioned—

1. The widespread belief that the small college has many advantages over the larger institutions. This belief, whether based upon facts or not, is a very certain element of strength to these institutions.
2. Local pride in the various communities where colleges have been established and the interest and support of the men of wealth.
3. The strong religious support of most of these institutions.
4. The democratic spirit of the American people.
5. The increased standards of professional schools and the more exact definition of the high school and the university seem to leave a definite field of operation for the small college.

On the other hand there are certain factors that seem to stand in the way of the development of the small college. These are:

1. The rapid development of the high school within the last 25 years. Much of what was formerly taught in the college is now

¹ Harper, W. R. *The Trend in Higher Education*, pp. 349-390.

offered in the high school, and the latter is usually equipped to give such work in a more effective manner. Add to this the present tendency of the high school to extend its course two additional years, and we must admit that it becomes a menace to the traditional small college.

2. On the other side of the college is the university. This institution is also the product of the last quarter century. In the 10 years from 1904 to 1914 the number of students in 30 universities increased from 67,000 to 113,000, or 68 per cent. The reasons why these powerful, well-equipped, State-supported institutions should draw a large part of the constituency of the small college are so evident that they need not be discussed further.

3. The recent tendency toward specialization makes demands for a broad and varied curriculum, to suit the various desires and capacities of students. These demands the small and poorly equipped institutions can not meet. This has led students to finish their courses in the universities. The result has been the depletion of the upper two classes in the small college until in many cases there are few students who rank above sophomores.

4. Perhaps the greatest difficulty confronting the small college is lack of funds to keep its work up to present standards. Evidence of this has already been presented. With few students and a small and uncertain income at least 50 per cent or more of these institutions find it impossible to keep up with even the minimum of present standards. Should such institutions continue to grant degrees?

We come now to the solution. What changes seem desirable? What place is the small college to hold in the future? Many suggestions have been offered. We can barely mention these here.

1. In the first place, it is certain that a number of these institutions will survive the struggle of existence and be all the stronger for it. President Harper suggested that 25 per cent of our colleges should be expected to meet the new demands. Recent evidence proves that this was a reasonable estimate. In 1900 there were only 3 colleges in the South that had standard requirements for entrance, while in 1912 this number had risen to 160.¹

2. A second alternative for the college of limited means is that of limiting its work to that of the standard high-school course and changing its name accordingly. We have already seen that a large per cent of our so-called colleges, especially in the South, clearly belong to this class. President Harper claimed that at least 25 per cent of all the institutions should make this change.

3. A third solution has been found in the amalgamation of two or more institutions of limited means. This has frequently been accom-

¹ Colton, E. A. The Junior College Problem in the South. *Meredith College Bulletin*, January, 1915.

plished with success, and there is abundant opportunity for more work along the same line. We need but mention the instance referred to in North Carolina, where one church maintains 6 competing colleges, while only 1 of the entire 29 institutions of that State conforms to the requirements of the Southern College Association.¹

4. What of the remaining 50 per cent of small colleges which fall between the two above classes? These institutions are not qualified to offer four years of college work and yet can not be asked to attempt to do no college work at all. The private junior colleges of to-day, 66 of which are considered in this report, are the answer to this question. Since the days of President Harper, who so ably championed the cause of the junior college, there has been a growing conviction of the truth of his contentions. The Commissioner of Education wrote in 1912:²

In the years that have elapsed since this great educational statesman uttered these words the movement for the readjustment of the name and organization of institutions to fit more exactly their real purposes and practices, and for the organization of junior colleges or the reorganization of old institutions on substantially a junior college basis, has gone on slowly but with a sure step.

If the reader will but glance at Table 3, on page 42, which shows the dates of the organization of junior colleges, he will be convinced that his "slow and sure step" has now become a "double quick."

In all parts of the country there have appeared ardent supporters of this plan. Miss Colton, of Meredith College, already referred to, wrote in 1915:³

The South offers a flourishing field for the junior college. No other section of the country would be more benefited than the South by such a reorganization of its higher institutions of learning.

In another connection she says:

The standard of all church colleges in the South would be much improved if the weaker denominations would build one standard college in each State, or a group of States, with an affiliated junior college in each State of the group, and if the stronger denominations would limit the number of their colleges in the State to one college for men and women, either separate or combined, and to one or two junior colleges.

A number of the States have taken definite steps toward the accrediting of junior colleges. Among these may be mentioned Virginia, Missouri, Illinois, Minnesota, California, and others. More detailed information in regard to this will be found in a later chapter on "Accrediting of Junior Colleges." As will be seen there, the number of institutions that are consenting to limit their work to two years is surprisingly large.

¹ Colton, E. A. The Junior College Problem in the South. Meredith College Bulletin, January, 1915.

² Rep. Commis. of Educ., 1912.

³ Colton, A. E. The Junior College Problem in the South. Meredith College Bulletin, 1915.

Why have these schools been willing to become junior colleges in such large numbers? In order to be able to answer this question directly, we included question 13 in the questionnaire to junior colleges (see Appendix A). The replies of 69 institutions have been summarized on pages 36-37. A few of them, however, refer especially to the small college and will be discussed briefly.

1. The junior college offers a way out for those who have so earnestly maintained the value of the religious control of higher education. Its recent rapid development is due in part to the fact that the leaders of denominational colleges are awakening to their opportunities.

President Stout, of Howard Payne College, says:¹

The junior college is the solution to one of the church's exceedingly knotty problems in education.

President Leath, of North Texas College, in discussing this same problem said:² "The problem before the church is to produce a frictionless system of church schools," and he finds the junior college to be the key to the solution of this problem.

In view of the conditions existing in some of the Southern States, especially, these statements of the educational leaders of a prominent church are significant.

TABLE 2.—*Reasons for organizing junior colleges.*³

Reasons.	Number.	Per cent.	Rank in frequency. ⁴	Rank in importance. ⁴
Geographical.....	10	18	11	10
Financial.....	26	46	3	3
Desire of parents.....	17	30	9	7½
Desire of students.....	25	44	4	5½
Segregation of sexes.....	14	25	10	7½
Religious.....	38	68	1	1
Vocational.....	20	35	7	10
Teacher training.....	19	34	8	10
Professional.....	22	39	5½	4
Completion.....	36	64	2	2
Local needs.....	22	39	5½	5½

¹ Stout, H. E. The Place of the Junior College. Bul. of Bd. of Educ., M. E. Church South, 1917.

² Leath, J. O. The Relation of the Junior College and Standard College. (Same Bulletin.)

³ A summary of the replies of 54 private junior colleges to question 13 of the questionnaire. (See Appendix A.)

⁴ In the fourth column is given the rank in frequency of mention, while in the fifth column the rank in frequency of which each reason was underscored as especially important. The former is the more reliable measure, because it represents the larger number of replies.

REASONS FOR THE ORGANIZATION OF PRIVATE JUNIOR COLLEGES,
RANKED IN ORDER AS DETERMINED BY THE FREQUENCY OF
MENTION.

1. To provide opportunities for higher education under church control.
2. To provide a completion school for those who can not go further.
3. Financial difficulty of maintaining a four-year course.
4. Desire of students for college work near home.
5. To meet the entrance requirements to professional schools.
6. To meet specific local needs.
7. To provide vocational training in advance of high-school work.
8. To provide additional opportunities for teacher training.
9. Desire of parents to keep children near home.
10. Desire to secure segregation of sexes.
11. Geographical remoteness from a standard college or university.

If the private junior college can secure the values to be derived from the religious control of higher education, and at the same time eliminate the evils that have risen as a result of low standards and demoralizing competition which has been so common with denominational institutions, we may safely predict a secure place for it in future educational systems.

2. In the South, where colleges for women seem to flourish, the junior college finds another stronghold. With insufficient funds at their disposal but still convinced of the advantages of the segregation of the sexes during certain years of adolescence, these institutions have found the junior college admirably adapted to their needs. President Wood, of Stephens College, in an address before the National Education Association in 1916, said:¹

The cordial reception tendered them [the junior colleges in Missouri] was due to various causes, the chief of which was the growing concern of parents and educators over conditions surrounding girls yet in their teens, in the large coeducational institutions. Here lies the argument for giving the private junior college for women a definite place in an educational system. Through it the period of training of the adolescent girl may be extended two years beyond that provided by the present organization of the secondary schools.

It should be added that the University of Missouri, through the utilization of the junior-college idea, has found a definite and undoubtedly a permanent place for the small colleges for women of that State. Its example is worthy of imitation.

3. In some sections of the country the private junior colleges have been encouraged as a means of providing for additional opportunities for teacher training. This is especially true of Texas, where the so-called "junior-college law" is nothing but a provision entitling

¹ Wood, James M. The Junior College. Address before Nat. Ed. Assoc., July 6, 1917. Stephens College Bulletin, June, 1916.

graduates of first-class junior colleges, as well as other standard colleges of the State, to receive a first-grade State certificate upon fulfilling certain other requirements. A large number of junior colleges have been established under the provisions of this law, evidently expecting to make teacher training a prominent feature.

Nineteen, or 34 per cent, of the private junior colleges replying to the questionnaire mentioned the desire to provide additional opportunities for teacher training as one of the reasons for their organization. As long as there comes from the various States a constant call for more and better trained teachers, no one can deny that the small college, equipped to do well what it attempts to do, has an excellent opportunity to perform a much-needed service for the schools of the country.

4. Perhaps the most important single factor that has led small colleges to become junior colleges is that of the financial difficulty of maintaining a four-year course under present standards. This feature has already been discussed at length and need only be mentioned here. Seventeen institutions replying to the questionnaire mention this as an especially important reason for making a change.

When President Harper suggested in 1902 that perhaps 50 per cent of the colleges of the country should limit their work by becoming junior colleges, he met with very little response from the colleges themselves. Now the wisdom of his advice is widely recognized. In this connection the following quotations from letters accompanying the replies to the questionnaire will be of interest:

A big controlling reason, at the time of reorganization, was a desire to make only honest claims. I knew that we could not, with the resources at hand, give a baccalaureate course and hence ceased to claim to do it.

Our chief reason was honesty of standards. We did not want to advertise the school as doing more than two years of college work when we knew that it could not be well done with our limited equipment.

We prefer good standing among colleges as a junior college to poor standing as a senior college.

The junior college, if fostered, will enable the honest small college to do real worth while work and will be the means of closing the "degree-giving mill" so prevalent in our country.

These college presidents have realized the fact that we have endeavored to emphasize throughout this chapter, namely, that the junior college offers a solution to the problem of the small college. By such an organization the small college secures for itself a definite place in the educational system; it becomes an honest institution by claiming to do only that which it can do well, and puts itself in position to meet certain great educational needs such as those which we have mentioned in this and other chapters of this report. By this means there will be assurance that the excellent contributions of the

small college to the education of American democracy will be continued, but that at the same time the serious evils that have so frequently been a by-product of these institutions will be checked if not absolutely abolished.

No discussion of the relation of the small college to the junior college would be complete without some mention of the recent educational experiment carried out so systematically by the University of Missouri. In the number of weak and poorly-equipped institutions attempting to do college work, Missouri was perhaps typical of the other States which we have described. One exception might be noted, however, in the fact that in this State most of the colleges were for women.

In 1911 a few of these institutions, feeling that they were misfits in the field of higher education, having no recognition by the State, and assured that "their salvation depended upon getting such recognition," invited the University of Missouri to extend its accrediting system to include the small college. The invitation was readily accepted. In the working out of a plan for such, the university consulted freely with those representing the colleges concerned, and the final arrangement was mutually agreed upon.

For many reasons it was agreed that the work of these institutions should be limited to two years. Certain requirements were set up that all were expected to meet. Any institution desiring to be accredited first applied for a blank which was furnished by the university. On this blank was placed carefully data relative to the actual status of the institution on the points mentioned in the requirements. If the university authorities were convinced by the report that the institution deserved to be considered, a special committee was sent to inspect the same, with power to take final action.

An evidence of the success of the plan is found in the large number of schools that have been accredited. In the 1916-17 catalogue of the University of Missouri we find the names of 14 accredited junior colleges. If we look to the colleges themselves, we find sufficient reason for this enthusiastic response. They report a better faculty, better equipment, higher entrance requirements and requirements for graduation, more students of a higher class, more graduates, and better financial support.

President Wood, of Stephens College, Columbia, Mo., in discussing these results before the National Education Association in 1916, reports an increase of 180 per cent in enrollment in his school from 1912 to 1916. The number of graduates during the same period increased 227 per cent. The percentage of high-school graduates in the literary department increased from 57 per cent to 87 per cent

during this time, while an annual deficit of \$15,000 was turned into an annual surplus of \$4,000.¹

In regard to the encouraging of financial support after becoming junior colleges, Prof. Coursault reports an excellent example:²

An instance of this appeared when one of the accredited junior colleges needed \$75,000 to complete payment on a building. A St. Louis man headed the subscription list with \$10,000, and in doing so remarked: "I never contributed to this college before because I was not certain that its work was effective. But now, since the university has vouched for the efficiency of the institution, I am glad to contribute to its needs."

In February of this year the University of Missouri issued a special bulletin of 182 pages devoted strictly to the needs of the junior colleges of that State. It is apparently safe to say that the junior college in Missouri bears every mark of success, and that the example there set merits imitation.

¹ Wood, James M. *The Junior College*. Address before Nat. Ed. Assoc., New York, July, 1916, Stephens College.

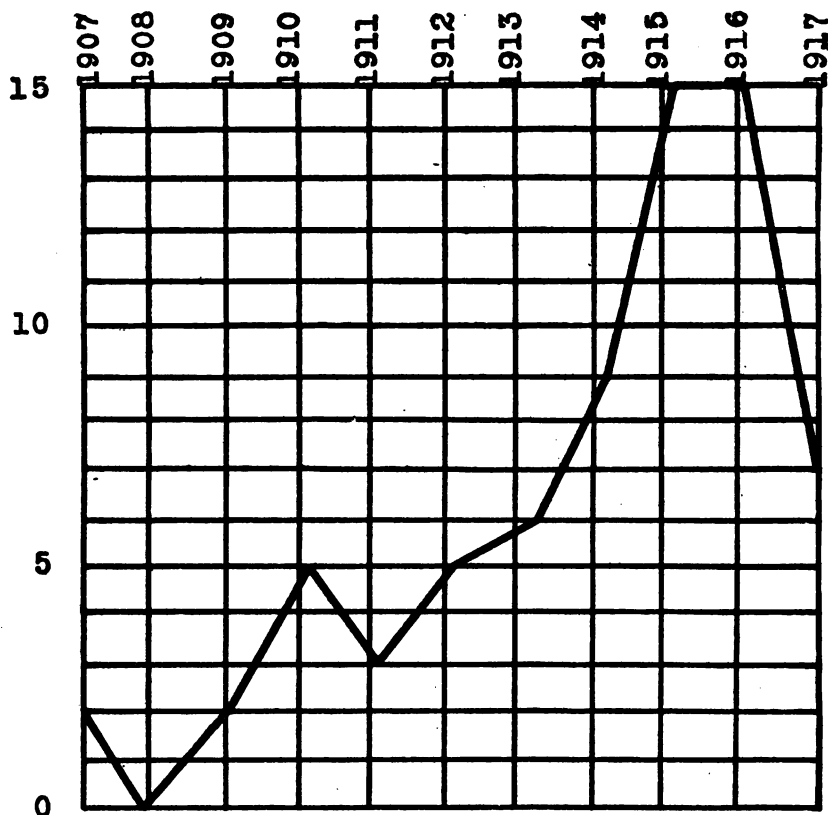
² Coursault: *Standardizing Junior Colleges*. *Educ. Rev.*, vol. 8, pp. 36-62.

Chapter IV.

PRESENT STATUS OF THE JUNIOR COLLEGE.

1. RECENT GROWTH.

In an earlier chapter were traced the beginnings of the junior college movement. As was there suggested, this new departure in education found its first significant expression at the University of Michigan in the early eighties. Later, in 1892, it was taken up almost

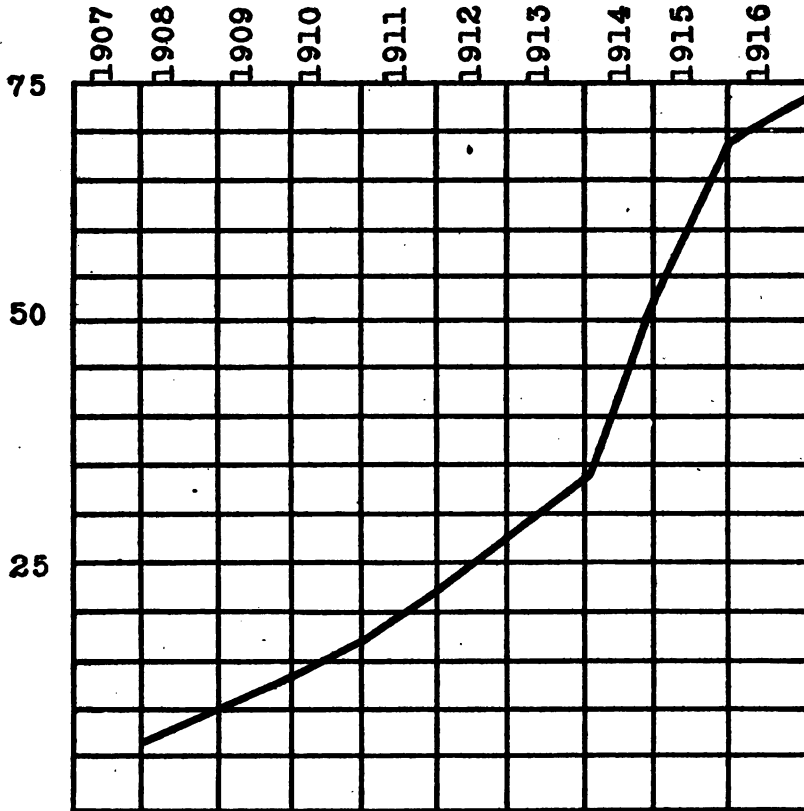


GRAPH II.—Number of junior colleges organized each year for the years 1907-1917.

simultaneously by the Universities of Chicago and California. It will be remembered that in these institutions there was not only a reorganization of the liberal arts colleges into upper and lower divisions, or junior and senior colleges, but that also definite steps were taken toward the reorganization of the high schools and colleges of the country in accordance with this idea. Both institutions encouraged high schools to extend their courses so as to include at least

one and ultimately two years of standard college work. The University of Chicago in particular emphasized also the necessity of small colleges limiting their work to the first two years rather than attempting to offer the full four years of college work.

Although especially ably championed by President Harper, of the University of Chicago, and by Dean Lange, of the University of California, and although accepted favorably by many educators, the



GRAPH III.—Total number of junior colleges in operation each year from 1907 to 1917.

junior college movement made little headway during the next 15 years. The most significant event during that time was the organization of a junior college in connection with the high school at Joliet, Ill., in 1902. This institution is now perhaps the oldest junior college in operation, and its apparent success of 16 years speaks much for the junior college movement as a whole.

In 1907 the legislature of the State of California passed an act permitting high schools to offer the first two years of standard college work in addition to the regular four-year high-school course. The decade since that time has witnessed the rapid growth of that idea. A number of public high schools in California, Illinois, Michigan,

Minnesota, and Iowa are now offering one or two years of standard college work. During the same period, and especially since 1911, when the University of Missouri launched a vast educational experiment by accrediting the small colleges of that State, the junior college idea has made wonderful progress in connection with the small and poorly equipped colleges of the country. For various reasons, considered in another chapter, an ever-increasing number of these institutions, such as those existing in Missouri, Texas, and other Southern States, are accepting gladly this readjustment. The success of the movement so far as these institutions are concerned seems to be assured.

The rapidity of this growth is indicated in Table 3 and Graphs II and III. Of the 76 junior colleges replying to the questionnaire, 69 have been organized since 1907. The median date for the organization of these 69 institutions is 1907. This means that half of that number have been established within the last three years, a rate of growth that must certainly be recognized as significant. As the underlying reasons for this growth have already been discussed, we may pass now to a consideration of the various types of junior colleges in operation at present and the number and distribution of each type.

2. VARIOUS TYPES OF JUNIOR COLLEGES.

As we have already indicated, the junior college affects and is affected by at least four of our traditional educational institutions—the university, college, normal school, and high school. This interplay of influences resulted in what one may call four different types of junior colleges. These are:

1. The junior college or lower division of the university.
2. The normal school accredited for two years of college work.
3. The public high school extended to include the first two years of college work.
4. The small private college which has limited its course to two years beyond the standard high school.

The close relation existing between the general influences and the types of institutions resulting has been roughly illustrated in Graph IV.

Consideration will be taken in order of each of these types, speaking briefly of the nature, organization, number, and distribution of each.

TABLE 3.—*Growth of the junior college movement from 1907 to 1917*

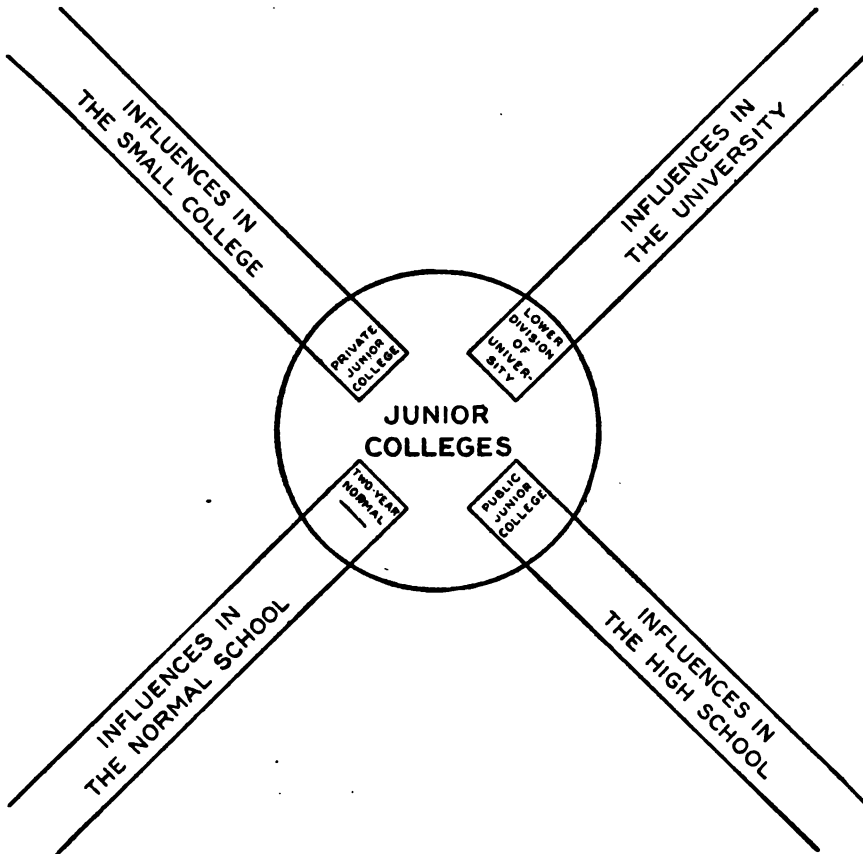
Year:	Number organized.	Year:	Number organized.
1907.....	2	1914.....	9
1909.....	2	1915.....	15
1910.....	5	1916.....	15
1911.....	3	1917.....	7
1912.....	5		
1913.....	6	Total.....	69

Median year, 1915.

1. THE JUNIOR COLLEGE IN THE UNIVERSITY.

Mention has already been made of the organization of a junior college at the University of Chicago and of the so-called "lower division" at the University of California. This organization is still maintained in these institutions, which justifies their classification under the above heading. To these must be added the University of Washington, which more recently has adopted the same plan.

In these three institutions there is at present a distinct recognition of the junior college idea as affecting university organization. Each



GRAPH IV.—Influences that have contributed to the origin and development of the various types of junior colleges.

has divided its traditional four-year course into two quite distinct divisions. The lower division, or junior college, includes the first two years; and the upper division, or senior college, the last two years of the standard college course. In order to show that this distinction is not in name only, it may be well to consider at length the organization of these institutions.

In the circular of information of the University of California we find the following regulations:

The work of the lower division comprises the studies of the freshman and sophomore years. The junior certificate marks the transition from the lower division to the upper division of the undergraduate course. All candidates for the bachelor's degree in the college of letters must qualify for the junior certificate before proceeding to the upper division. * * * For the junior certificate, 64 units of university work are required, in addition to 45 units required for matriculation, making a total of 109 units. A surplus matriculation credit does not reduce the amount of work (normally 64) required in the lower division (except by examination or advanced work in the same field completed successfully). These 64 units of the lower division may normally be completed in two years, but students are required to remain in the lower division only until they are able to complete the requirements for a junior certificate.

The interesting thing about these requirements is the combining of admission and lower division credits in the total of 109 required, and the possibility of the student completing this amount in less than two years after leaving high school. It should be said that, in a recent report of a committee of this university, these two features were severely criticised and changes suggested. It was said that the whole matter was up for discussion, but that it was doubtful whether any change would be made at present. The work as now organized in this institution most certainly considers the first two years of the university as an extension of the secondary school course and does not permit specialization until the student is enrolled in the upper division.

The bulletin of the University of Washington for April, 1917, contains the following significant statements:

The work of the lower division comprises the studies of the freshman and sophomore years of the undergraduate curriculum and leads to a junior certificate. The work consists primarily of the elementary or introductory courses of the various departments. Its aim is to supplement the work of high school and to contribute to a broad general training in preparation for the advanced work of the upper division. To receive the junior certificate the student must have earned not less than 60 college credits and must have completed in high school and college together the amount of work specified in the subjects mentioned below. The object of these requirements is to secure for the student a knowledge of a wide range of subjects; to distribute this knowledge over the fundamental fields. To this end the high school and college are viewed as essentially a unit.

It will be of interest to know that in the detailed statement of the requirements for the junior certificates in this bulletin four groups of subjects are mentioned: (a) Those required in high school; (b) those required either in high school or college; (c) those required in college; (d) those conditionally required in college.

Here again is found the junior college idea strongly emphasized in the close relation of the high school and first two years of college work and the recognition of the end of the sophomore year rather

than graduation from high school at the close of the period of secondary education.

The University of Chicago has maintained the junior and senior college plan of organization since the days of President Harper. In this institution the "junior colleges" include the first and second years of residence. After completing the requirements of the junior colleges and receiving the title of Associate, students pass for their third and fourth years to the senior college. The junior and senior colleges have their separate administrative officers and regulations and are treated in every way as quite distinct.

The requirements for admission and for graduation for the junior college in this institution are similar to those already mentioned, and further discussion of this feature will not be necessary here. Attention is called, however, to the regulation relative to college work done in high schools as a further evidence of the recognition of the junior college idea. In the circular of information for April, 1918, we read:

The University of Chicago is prepared to encourage any adequately equipped secondary school to extend its work so as to cover the work now offered in the freshman and sophomore years of the college. Any high school which is prepared to undertake such work can come in contact with the junior college officers of the university with a view to organizing advanced courses. The university aims to develop this intimate cooperation with a view to promoting wherever possible the enlargement of the secondary school curriculum.

The three institutions mentioned above are probably the only three that now maintain a distinct organization for the upper and lower divisions of the university or standard college course. Many other institutions, however, have recognized the junior college idea to a greater or less extent. For further information the reader is referred to the chapter on the accrediting of junior colleges. A point of special interest to be noted in this connection is the recent recommendation of President Butler, of Columbia University. (See Chapter III.)

2. THE JUNIOR COLLEGE IN NORMAL SCHOOLS.

As a result of a tendency, previously discussed, on the part of normal schools to undertake college work, there has appeared in several States what may be called a second type of junior college. This is the normal school accredited for two years of college work. The chief justification for classifying these institutions as junior colleges is the fact that they are so referred to by several of the State institutions and State departments of education in replying to the questionnaire. In a number of the States they are the only junior colleges reported.

It has not been thought advisable, considering the limits of this investigation, to discuss in detail the work and organization of these

institutions. So far as known, they are typical normal schools, interested primarily in the training of teachers. They have, however, found it to their advantage for one reason or other to undertake certain standard college work; in some cases the entire four years are offered. Naturally, this practice was soon followed by a demand for the accrediting of the work offered. The situation was thus in many respects similar to that of the small college. Many of the normal schools might safely be intrusted with two years of work at least, but for obvious reasons should not expect to do more. The result is that State legislation and university regulations have officially recognized these institutions as junior colleges. The extent of this practice may be inferred from the following outline which is based upon facts gathered from replies to the questionnaire. It is not claimed that these data are at all complete.

PRESENT STATUS OF THE RECOGNITION OF NORMAL SCHOOLS AS JUNIOR COLLEGES.

Arizona.—Graduates of State normal schools are entitled to 30 units blank credit at the university.

Indiana.—One normal school accredited as a junior college.

Michigan.—One normal school accredited as a junior college.

Minnesota.—Graduates of normal schools receive one or two years of credit in university, according to course which they have taken and which they expect to pursue; five institutions are thus accredited.

North Dakota.—Graduates of the State normal schools receive credit at the university according to the amount of college work completed, up to two full years.

Nebraska.—Three normal schools are approved for two years of college work.

Oklahoma.—Graduates of seven normal schools are given credit at the university according to the amount of freshman and sophomore work completed.

Utah.—Standards have been established for normal schools which offer two years of college work. These agree substantially with junior college standards of other States.

West Virginia.—Six normal schools are offering college work with a definite understanding as to the amount of credit that will be received at the State university.

Wisconsin.—The State normal schools have been authorized by law to give a two-year college course which is accredited at the State university. Five institutions are now offering such a course.

3. THE PUBLIC JUNIOR COLLEGE.

The type of junior college that is attracting most attention at present is that which has arisen as a result of the extension of the traditional high-school course to include the first two years of college work. This institution has been designated throughout this report as a public junior college.

In its typical form it consists merely of the first half of the standard college course offered in the high-school building and taught for the most part by high-school teachers. In contrast with the private junior college, discussed in the following section, it is distinctly a

public institution. In most of the States it is supported by tuition and local taxation. In California, where more than half of these institutions are now located, the State legislature has provided for State aid at so much per pupil to supplement local taxation. This provision makes the junior college as definite a part of the system of public education as is the high school.

We have already considered in detail the forces that have operated in the establishment of these institutions. In general, it may be said that they have arisen out of the public demand for increased opportunities for higher education. In this respect they are typical of all American educational institutions. The rapid increase in number of public junior colleges seems to indicate they are filling a real need in the educational system. All of the 21 located in California have been organized since 1907. This is true also of practically all of those reporting from other States. The present status of the movement is shown in the following table:

TABLE 4.—*Public junior colleges.*

States.	Number reported as operating.	Number considered in this report.	States.	Number reported as operating.	Number considered in this report.
California.....	21	11	Minnesota.....	5	5
Idaho.....	1	1	Missouri.....	2	1
Illinois.....	3	1	Texas.....	1	1
Iowa.....	1	1	Washington.....	1	1
Indiana.....	1	1			
Michigan.....	3	1	Total.....	39	21

4. THE PRIVATE JUNIOR COLLEGE.

Discussion at length has already been made of the forces that have operated in the establishment of the private junior college. In view of this, as well as of the fact that a large part of this entire discussion is devoted to a consideration of the present status of this type of institution, only brief mention of it will be necessary here.

The typical private junior college as it exists in a large number of the States, especially in the South, is a denominational institution offering, in addition to various other courses, a four-year high-school or academy course, and in addition substantially the first two years of college work. For the most part these institutions were formerly four-year colleges, at least so on paper, which have been for various reasons reduced to limit their work to that for which they are qualified. They differ from the public junior college in purpose, organization, and control, and hence deserve mention as a special type. The increase in the number of private junior colleges has been rapid, as the following statistics will indicate.

TABLE 5.—*Private junior colleges.*

States.	Number reported as operating.	Number considered in this report.	States.	Number reported as operating.	Number considered in this report.
Arkansas.....	1	1	North Carolina.....	3	3
California.....	4	2	Nebraska.....	1	1
District of Columbia.....	1	1	Ohio.....	2	2
Georgia.....	3	2	Oklahoma.....	1	1
Illinois.....	7	6	South Dakota.....	2	2
Indiana.....	3	2	Pennsylvania.....	2	1
Iowa.....	1	1	Tennessee.....	3	3
Kansas.....	1	1	Texas.....	16	11
Kentucky.....	5	4	Virginia.....	9	5
Louisiana.....	3	3	West Virginia.....	2	1
Massachusetts.....	1	1	Wisconsin.....	2	1
Minnesota.....	4	4			
Mississippi.....	2	2	Total.....	93	57
Missouri.....	14	7			

3. SOURCES OF SUPPORT.

The material included in this section is based upon the replies to question 2 of the questionnaire to junior colleges. (See Appendix A.) Fifty-two private and 19 public institutions answered the question at least partially. At best, however, the returns are altogether too incomplete to enable one to state any very reliable conclusions. There is need for a more careful investigation of this phase of our problem.

A summary of the replies has been made in Tables 6, 7, and 8. On the basis of these statistics we are perhaps justified in stating the following conclusions:

1. The support of public junior colleges is derived from three principal sources: Tuition, taxation, and State aid. Taxation, one would expect, occupies first place. Something of the relative value of each of these sources is indicated in the following table:

TABLE 6.—*Sources of support of public junior colleges.*

[Based upon the replies of 19 institutions.]

Source.	Number of schools.	Per cent.
Taxation.....	16	84
State aid.....	9	47
Tuition.....	6	32

Of the 19 schools, 16 mentioned taxation, 9 mentioned State aid, and 6 mentioned tuition among the sources of support. The interesting point in this is the extent to which the junior college is being recognized as an integral part of the system of public education and hence an object of public support.

Perhaps the most significant example of State recognition of the public junior college comes from California. In that State the law

provides for the support of these institutions on the same basis as the high schools. This law provides in part as follows:

In apportioning the county high-school fund, the superintendent of schools of the county shall count the average daily attendance of all students enrolled in the junior-college courses as a part of the average daily attendance of each high-school district in which such students are enrolled. * * * The State controller, in making the annual estimate of the amount necessary for the support of the high schools, as required in section 1760 of the Political Code, shall include in the basis of his estimate the average daily attendance of all students enrolled in junior-college courses, and the superintendent of public instruction, in apportioning the State high-school fund, shall count the average daily attendance of students enrolled in junior courses as a part of the average daily attendance of each high-school district in which such students are enrolled.

The amount received under these provisions is \$75 per student. Of this amount, \$60 comes from the county fund and \$15 from the State.

1. The support of private junior colleges is derived mainly from the following sources: Tuition, endowment, church budget, and offerings and donations. There is also a relatively large amount reported from miscellaneous sources, which include income from board and room. Something of the relative value of these sources may be inferred from the following tables:

TABLE 7.—*Sources of support of private junior colleges.*

[Based upon replies of 52 institutions.]

Sources.	Number of schools.	Per cent.
Tuition.....	50	96
Endowment.....	22	42
Church budget.....	26	50
Offerings and donations.....	18	33
Miscellaneous.....	18	33

Of the 52 institutions replying, 50 mentioned tuition, 22 endowment, 26 church budget, and 18 offerings, donations, and miscellaneous sources.

TABLE 8.—*Sources of support of private junior colleges, showing amount and per cent from each.*

[Based upon the replies of 41 institutions.]

Sources.	Colleges.	Amount.	Per cent.
Tuition.....	41	\$822,595	57.0
Endowment.....	19	253,450	17.5
Church budget.....	20	73,686	5.0
Offerings and donations.....	14	30,770	2.0
Miscellaneous ¹	14	267,987	18.5
Total.....		1,448,488	

¹ Includes all income from board and room.

Of these sources the largest amount is derived from tuition and a comparatively small amount from endowment. An examination of the above table shows that fully 75 per cent of the total income of these institutions is derived from sources that can not be depended upon from year to year. In other words, the fixed and assured income is relatively small. An increase in the amount of permanent productive endowment would remedy this situation. Certainly \$100,000 should be the minimum for such.

4. COURSES OF STUDY.

In order to determine what was being taught in the junior colleges, an examination was made of the latest courses of study available of 28 private and 19 public junior colleges. In Tables 9 and 10 there will be found a list of all the subjects offered by each type of institution ranked in order of frequency of mention.

An examination of these tables enables one to draw some interesting conclusions. Among these may be mentioned the following:

1. The traditional freshman and sophomore college subjects rank highest in frequency of mention. The 11 highest in the private junior colleges were: English, history, mathematics, Latin, German, chemistry, physics, botany, Bible, psychology, and education. The 10 highest in the public institutions were: English, history, mathematics, chemistry, French, German, economics, Spanish, physics, and Latin. From this it is easy to see that English, history, mathematics, and foreign language constitute the bulk of the curriculum in both types of institutions.

2. The attention of the reader is called to the relative prominence of Latin in the private junior-college subjects and to the fact that in the public institutions it is displaced by the modern languages. The former adheres more closely to the traditional program of studies.

3. Another feature worthy of mention is the fact that in private junior colleges education ranks tenth, as compared with twenty-ninth in the public institutions. Sixty per cent of the former and only 16 per cent of the latter offer courses in education. It is evident that the training of teachers is considered to be one of the special functions of the private junior college.

TABLE 9.—*Subjects offered by 19 public junior colleges, listed in order of frequency.*

English.....	19	Sociology.....	4
History.....	19	Electrical engineering.....	4
Mathematics.....	19	Astronomy.....	4
Chemistry.....	19	Agriculture.....	3
French.....	16	Education.....	3
German.....	15	Physiology.....	3
Spanish.....	13	Hygiene.....	2
Physics.....	13	General engineering.....	2
Economics.....	13	Architecture.....	2
Latin.....	12	Italian.....	2
Psychology.....	11	Entomology.....	1
Zoology.....	10	Dramatics.....	1
Botany.....	9	Printing.....	1
Biology.....	8	Plumbing.....	1
Mechanical drawing.....	8	Physiography.....	1
Machine shop.....	7	Elementary law.....	1
Art.....	7	Journalism.....	1
Home economics.....	7	Mineralogy.....	1
Commerce.....	6	Civil engineering.....	1
Philosophy.....	6	Mechanical engineering.....	1
Public speaking.....	5	Norwegian.....	1
Surveying.....	5	Ethics and logic.....	1
Music.....	5		
Greek.....	5	Total.....	302
Geology.....	4		

TABLE 10.—*Subjects offered by 28 private junior colleges, listed in order of frequency.*

English.....	28	Zoology.....	9
History.....	28	Biology.....	6
Mathematics.....	28	Public speaking.....	6
Latin.....	28	Sociology.....	6
German.....	25	Ethics and logic.....	6
Chemistry.....	24	Italian.....	5
Physics.....	19	Physiology.....	5
Botany.....	18	Agriculture.....	4
Bible.....	18	Art.....	4
Psychology.....	17	Geology.....	4
Education.....	17	Journalism.....	2
Economics.....	16	Hebrew.....	2
Spanish.....	15	Commerce.....	1
Greek.....	14	Machine shop.....	1
French.....	12	Hygiene.....	1
Philosophy.....	11	Astronomy.....	1
Home economics.....	11		
Music.....	9	Total.....	401

Two factors should, however, be considered which might serve to modify this conclusion. In the first place the private colleges were at one time four-year colleges, and hence may have inherited the courses in education from their former curriculum. In the second place the difference in the location of these institutions may have

been a deciding influence in the choice of courses of study. For example, a large per cent of the public junior colleges are in California, where the training of teachers is well provided for. On the other hand, a number of the private colleges are in Texas, in which State they were established especially for the purpose of providing better opportunities for the training of teachers.

4. A fact of even greater significance is brought to light when one considers the extent to which these institutions have introduced "finishing" or vocational courses. It will be remembered that in an earlier chapter it was claimed that the junior college should serve as a completion school for a large number of students. In view of this, one should expect to find a relatively large per cent of "finishing" subjects in the curriculums of these institutions. What are the facts?

In the two following tables there is presented a rough selection of subjects which may be considered more or less vocational in nature, together with the number of times each occurs for each type of institution.

TABLE II.—*Vocational subjects offered by 19 public junior colleges.*

Mechanical drawing.....	8	Printing.....	1
Machine shop.....	7	Plumbing.....	1
Home economics.....	7	Elementary law.....	1
Commerce.....	6	Journalism.....	1
Surveying.....	5	Civil engineering.....	1
Electrical engineering.....	4	Mechanical engineering.....	1
Agriculture.....	3		
Education.....	3	Total.....	53
General engineering.....	2	Per cent of total.....	17.5
Architecture.....	2		

TABLE 12.—*Vocational subjects offered by 28 private junior colleges.*

Education.....	17
Home economics.....	11
Agriculture.....	4
Journalism.....	2
Commerce.....	1
Machine shop.....	1
Total.....	36
Per cent of total.....	9

It will be noted at a glance that the public college is offering a greater range of subject matter than the private institution. Of the total of 401 subjects mentioned by the 28 private colleges, only 36, or 9 per cent, can be considered as vocational subjects. On the other hand, out of the 302 subjects offered by the 19 public colleges, 53, or 17.5 per cent, may be counted as belonging to that group. If education is omitted from each group, the per cents are 4.5 and 17, respectively.

It is evident that, so far as the course of study is concerned, the public junior college is more of a finishing school than the private institution. The real significance of this fact, however, does not come to light until attention is called to the graduates of these two types of institutions. Of the total number of graduates of the public colleges for the last three years, 73 per cent are continuing their work in a higher institution. On the other hand, only 41 per cent of the graduates of the private colleges are taking advanced work. From the standpoint of the student, then, the courses of study of these two institutions might well be reversed. The private school should be a finishing school, at least a much greater per cent of its courses should be finishing subjects. On the other hand, the public college might well be content with the narrower curriculum. If 59 per cent of the graduates of the private junior colleges can not go on with their university training, it occurs to the writer that these institutions can well afford to offer less of Latin and Greek and far more of vocational work.

5. TRAINING, EXPERIENCE, AND WORK OF TEACHERS.

In the discussion of the relative merits of the small college and the large university one hears much of the difference in the quality of instruction. Advocates of the smaller institutions often assert that students entering a university are taught by inexperienced assistants whose chief interest is research, and that they are grouped together in such large numbers for recitation purposes that personal contact would be impossible even if the latter were capable of and willing to give advice and help. On the contrary, they hold that the small college with its small classes, mature instructors, close contact, and keen personal interest, is the ideal place for the immature high-school graduate for two years at least.

As far as the writer is aware, most of this discussion has been based upon mere opinion, with little or no knowledge of the actual facts. In order to remedy this condition, and particularly because such has direct bearing upon the junior college problem, we have made an effort in this chapter to attack this question directly. It is hoped that the facts presented will put an end to our fruitless discussions and cause us to give credit where credit is due.

The writer recognizes the difficulty that one encounters in attempting to measure, by objective standards, the quality of instruction in an institution or set of institutions. Success in teaching seems at times to be something spiritual or innate, which appears often to operate independently of academic titles and scholastic attainments. We can not say, for example, that because an individual has that much-prized distinction of "doctor of philosophy" that he is as a result necessarily a better teacher. Common observa-

tion seems to furnish many evidences to the contrary. It is, however, a very poor recommendation for our scholastic and professional training if we are forced to admit that, other things being equal, the individual who has attained his advanced degree is not better prepared to instruct than those who have not had this additional training. Such an admission we do not believe to be necessary. In the investigation which follows and in the use of objective standards, we have assumed that "other things are equal." As this can neither be proved nor disproved, the evidence herewith presented should be valuable.

In measuring the training and experience of teachers in junior colleges as well as in the other institutions which we have investigated for purposes of comparison, the following items have been considered:

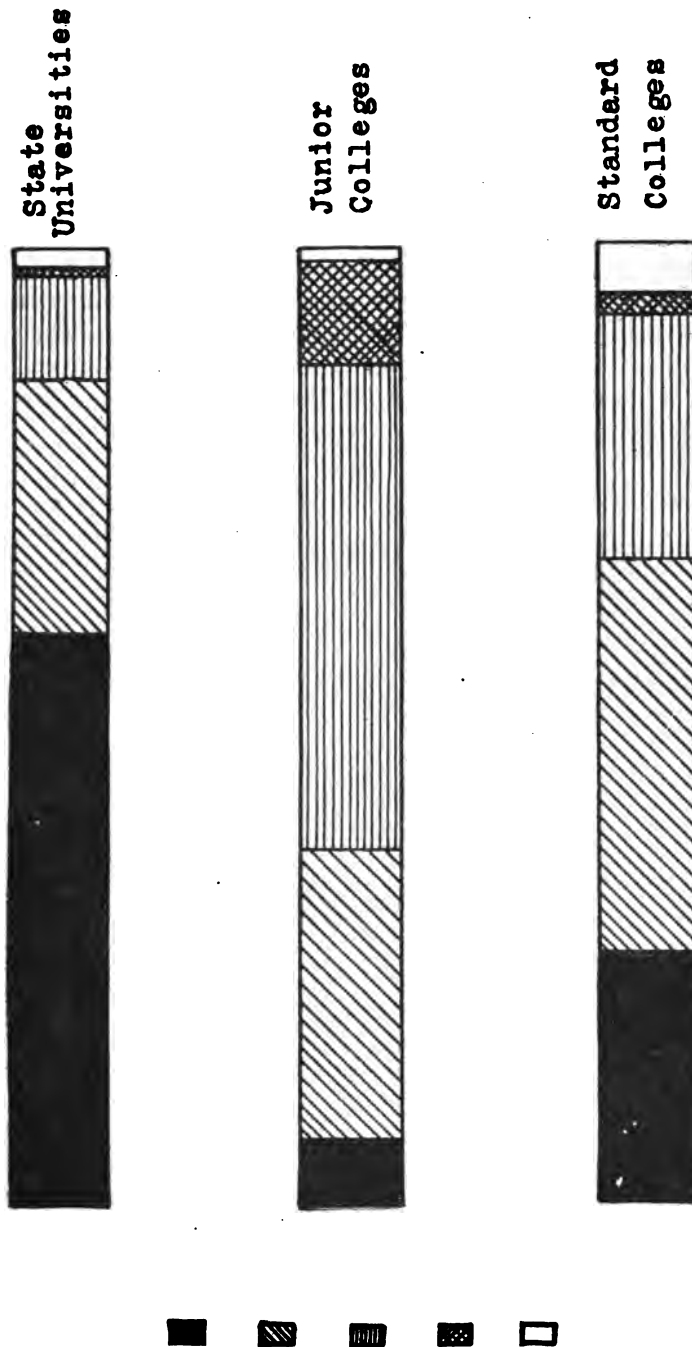
1. The highest academic degree of each instructor.
2. The amount of graduate work of each, measured in semesters.
3. The total years of teaching experience.
4. The total number of recitation periods (clock hours) taught by each per week.
5. The number of periods devoted by each to freshman and sophomore classes.
6. The number of students enrolled in recitation sections.

These points will be considered in the order named. The facts presented are based upon the returns from our various questionnaires (see Appendix). Any discussion necessary as to the reliability of the data used will be given in its appropriate place.

1. ACADEMIC DEGREES.

In this investigation only the highest degree of each instructor was considered. For example, if an individual reported both a master's and a doctor's degree, the latter alone was used in making the tabulations. Under the heading "doctor's degree," all of those having either the degree of doctor of philosophy or doctor of science were counted. Such degrees as doctor of divinity or doctor of literature were counted as unclassified. Under the heading "master's degree" those having the degree of master of arts or master of science were counted, and under the heading "bachelor's degree" all of those having the degree of bachelor of arts, bachelor of science, or bachelor of philosophy were counted. Any other degrees reported were put down as unclassified. There were very few of these, however.

Replies were received from 523 instructors representing 66 junior colleges, from 223 instructors representing three standard universities, and from 58 instructors representing three standard colleges. A summarized statement of the results is shown in Table 13 and Graph V.



GRAPH V.—Academic degrees of instructors of junior colleges as compared with those who instruct freshman and sophomore classes in standard colleges and universities.

A study of this table and graph yields some significant results. It is evident that, if the academic degrees of the instructors alone were considered as a measure of the quality of instruction, we would have to rank the junior colleges as inferior to the standard colleges and universities. Sixty per cent of the instructors of the three universities and 26 per cent of those of the three standard colleges have the doctor's degree, as compared with slightly over 6 per cent of those in the junior colleges. On the other hand, nearly 12 per cent of those offering instruction in junior colleges have no degree, as compared with four-tenths of 1 per cent of those in the universities and less than 2 per cent of those in the standard colleges. The median instructor of the three universities has a doctor's degree, of the colleges a master's degree, and of the junior colleges a bachelor's degree.

TABLE 13.—*A comparative study of the training of the instructors of junior colleges and those of certain standard colleges and universities as shown by degrees.*

Institutions.	Total instruc- tors.	Doctors.		Masters.		Bachelors.		None.		Unclassified.	
		Num- ber.	Per cent.	Num- ber.	Per cent.	Num- ber.	Per cent.	Num- ber.	Per cent.	Num- ber.	Per cent.
Private junior colleges.....	343	28	8.2	93	27.0	176	51.0	40	11.7	6	1.7
Public junior colleges.....	180	5	2.8	71	39.5	81	45.0	21	11.7	2	1.1
University of Iowa.....	74	37	50.0	21	29.0	14	19.0	1	1.3	0	.0
University of Illinois.....	88	55	62.5	21	24.0	10	11.4	0	.0	2	2.3
University of Minnesota.....	61	41	67.0	15	24.5	4	6.5	0	.0	1	1.6
Coe College.....	16	2	12.5	7	44.0	3	19.0	1	6.0	3	19.0
Cornell College.....	16	5	31.0	7	44.0	4	25.0	0	.0	0	.0
Grinnell College.....	26	8	31.0	10	38.0	8	31.0	0	.0	0	.0
Total junior colleges.....	523	33	6.3	164	31.0	257	48.0	61	11.7	8	1.5
Total universities.....	223	133	60.0	57	25.6	25	12.7	1	.4	2	1.3
Total colleges.....	58	15	26.0	24	41.0	15	26.0	1	1.8	3	5.1

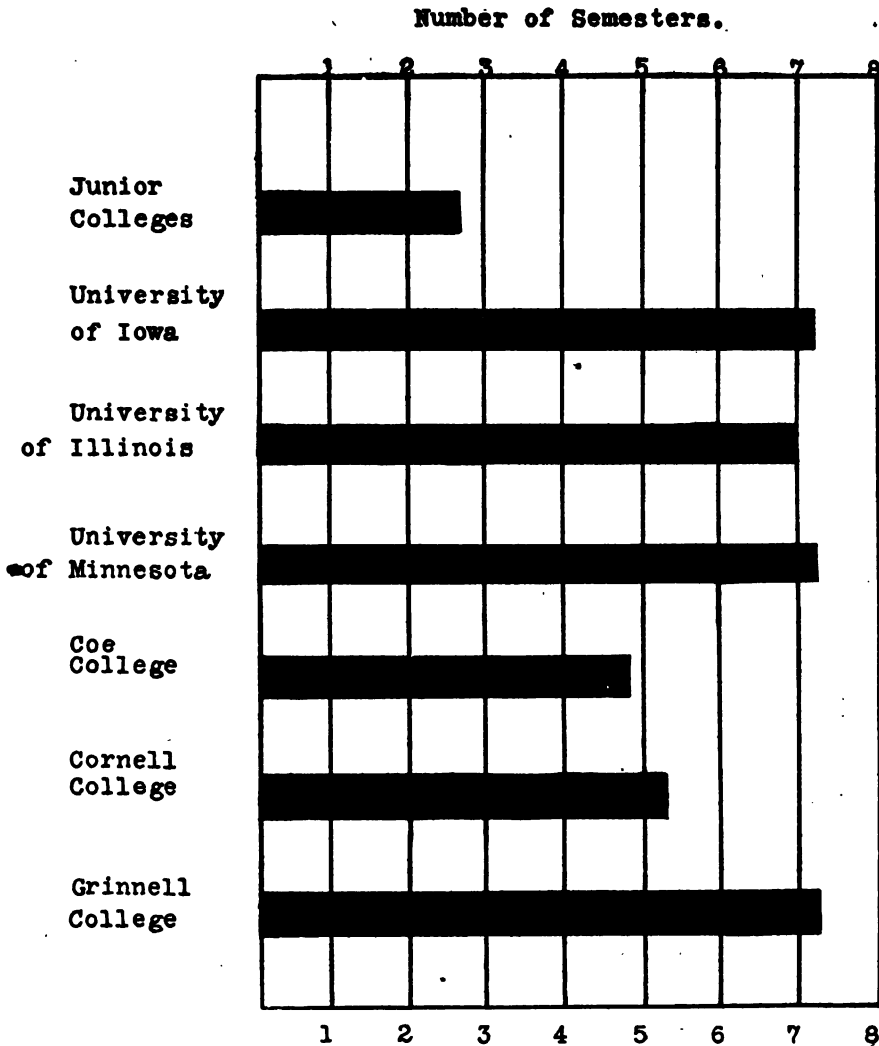
The present minimum standard for an instructor of a junior college, according to various recent attempts at standardization, is a master's degree, or its equivalent. Measured by this standard alone, about 61 per cent of the instructors of the junior colleges would fail to qualify, while only 14 per cent of those of the universities and 33 per cent of those in the standard colleges would fall below this standard.

The significance of these figures is so apparent that further discussion is unnecessary. Of course, it is unfair to consider this standard alone as a basis of comparison, and we hasten to a consideration of other factors.

2. AMOUNT OF GRADUATE WORK.

The results are equally significant if we compare the amount of graduate work done by the instructors of junior colleges with that of the instructors of standard colleges and universities. Replies were received from 469 instructors of 60 junior colleges, 198 instruc-

tors representing 3 universities, and 57 instructors representing 3 standard colleges. The summary of these returns is presented in Table 14 and Graph VI, and in the Appendix.



GRAPH VI.—Amount of graduate work of instructors of junior colleges as compared with those of standard colleges and universities.

The amount of graduate work of the instructors of the junior colleges is greatly inferior to that of those offering instruction in the universities and colleges considered in this report. The median amount for the former is 2.5 semesters, or a little over one year of graduate work, as compared with 7 semesters ($3\frac{1}{2}$ years) for those in the universities and 6 semesters (3 years) for the standard colleges.

TABLE 14.—*A comparative study of the amount of graduate work in semesters of the instructors of various institutions.*

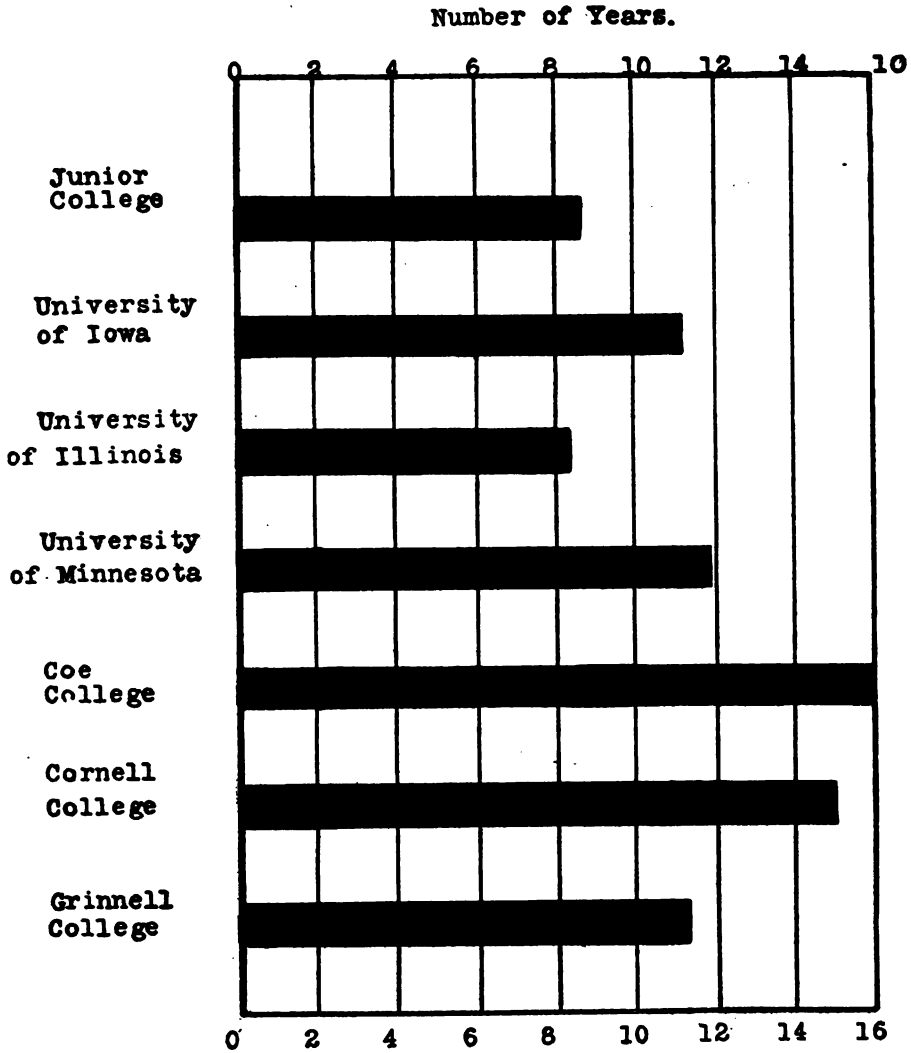
Institutions.	First quartile.	Median.	Third quartile.	Mean deviation.
Junior colleges.....	1.2	2.5	4.1	1.7
University of Iowa.....	5.0	7.1	8.8	1.8
University of Illinois.....	5.1	7.0	8.4	1.8
University of Minnesota.....	6.1	7.2	8.3	1.3
Coe College.....	2.3	4.7	6.5	2.2
Cornell College.....	2.5	5.3	8.5	2.1
Grinnell College.....	4.8	7.2	8.8	2.3

Compared with present minimum college standards nearly 50 per cent of the instructors of these junior colleges would fail to qualify, and more than 75 per cent would fall below the median of either the college or the university. A critical examination of the returns reveals the fact that 130, or 26 per cent of those replying, report no graduate work at all. It is evident that, in so far as the amount of graduate work is a measure of the training of an instructor and of the quality of instruction, the junior college must again be ranked below not only the standards maintained in standard colleges and universities, but also below those minimum standards that have been specified from the junior colleges themselves. These facts are certainly worth consideration.

3. TOTAL TEACHING EXPERIENCE.

Another measure of the preparation of an instructor, and hence indirectly a measure of his efficiency as a teacher, is the amount of teaching experience which he has had. The figures herewith presented are based upon the replies of 516 instructors representing 69 junior colleges, 218 instructors representing 3 universities, and 58 instructors representing 3 standard colleges. The summary of these returns is presented in Table 15, Graph VII, and in the Appendix.

The result seems to indicate that on the whole the teachers of the junior colleges have less teaching experience than those of the standard colleges and universities considered, the median amount for the former being 8.6 years as compared with 10 years for the university instructors and 12.5 for those of the standard colleges. There is probably not enough difference here to indicate any superiority either way. The facts presented should, however, refute the argument that teachers of freshmen and sophomores in these universities are inexperienced.



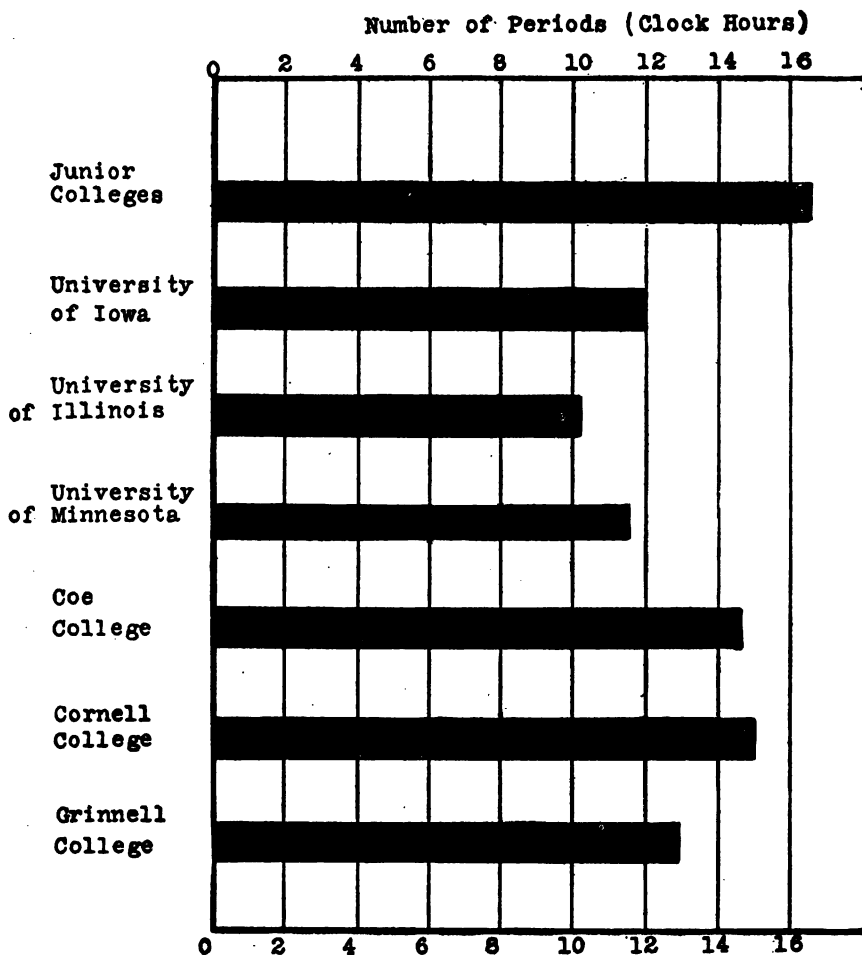
GRAPH VII.—Amount of teaching experience of instructors of junior colleges as compared with those of standard colleges and universities.

TABLE 15.—A comparative study of the number of years of teaching experience of the instructors of various institutions.

Institutions.	First quartile.	Median.	Third quartile.	Mean deviation.
Junior colleges.....	3.9	8.7	15.8	4.9
University of Iowa.....	5.0	11.2	16.9	6.4
University of Illinois.....	4.7	8.4	13.7	5.6
University of Minnesota.....	6.2	12.0	17.5	6.3
Coe College.....	6.0	16.0	20.0	7.5
Cornell College.....	5.5	15.0	20.5	7.5
Grinnell College.....	6.2	11.4	15.4	6.3

4. HOURS OF TEACHING REQUIRED.

It is evident that instructors who attempt to offer instruction of college grade must not be required to teach as many hours as those in secondary schools. So significant is this factor that practically all of the attempts which have been made to standardize the junior college have mentioned a maximum amount of teaching that can

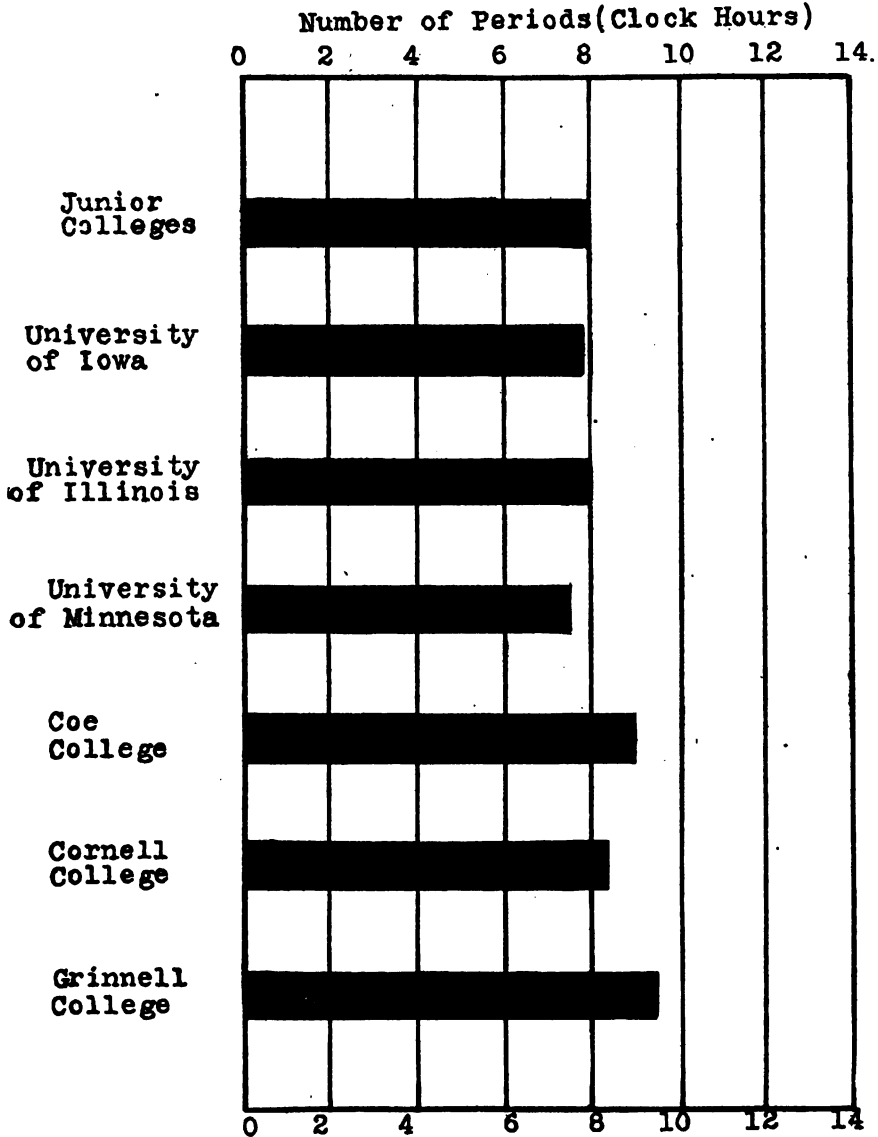


GRAPH VIII.—Number of recitation periods (clock hours) taught per week by instructors of junior colleges as compared with those of standard colleges and universities.

be required of each instructor (see chapter on Accrediting of Junior Colleges). The amount specified by these standardizing agencies varies from 15 to 20 periods (clock hours) per week. The former is the recommended standard, and the latter the maximum amount that should be required.

The data presented in Tables 16 and 17, Graphs VIII and IX, is based upon replies of 522 instructors representing 66 junior colleges,

213 instructors representing 3 universities, and 58 instructors representing 3 colleges. The median number of hours required of the junior college instructors is 16.4, as compared with 11 hours for university instructors and 14.2 hours for instructors in the three standard colleges.



GRAPH IX.—Number of recitation periods (clock hours) devoted by instructors of junior colleges to freshman and sophomore classes as compared with those of standard colleges and universities.

From these figures it seems that, in addition to the fact that the junior college teachers are not as well trained as those of standard

colleges and universities, more teaching is required of them and consequently less time is had for preparation. This also is to the disadvantage of the junior college. If we compare these results with the minimum standards mentioned above, we find that at least 50 per cent of the instructors are teaching too much and 25 per cent are teaching more than the highest amount permitted by any of the accrediting agencies. Certainly these facts are worth considering by those who would establish junior colleges as well as by those in charge of such institutions already in operation. Unless an institution has sufficient financial support to maintain a sufficiently large corps of instructors, it can hardly be justified in attempting college work. When an instructor is overloaded, the quality of his instruction will sooner or later fall below that which should be demanded for college work. This should not be tolerated for a moment.

The instructors that we have been considering in the last paragraphs give only a part of their time to the instruction of freshman and sophomore classes. Those in the junior colleges practically without exception teach high-school or academy classes, while those in the standard colleges and universities offer junior, senior, and graduate courses. For this reason it was thought necessary to ascertain the amount of time devoted each week to the first two years of college work in each type of institution. The results of this investigation are presented in Table 19.

TABLE 16.—*Number of 60-minute hours of teaching required per week of instructors in various institutions.*

Institutions.	First quartile.	Median.	Third quartile.	Mean deviation.
Junior colleges.....	12.46	16.4	19.51	4.35
University of Iowa.....	8.3	12.0	14.7	3.5
University of Illinois.....	7.3	10.1	12.9	3.0
University of Minnesota.....	8.6	11.5	13.8	2.8
Coe College.....	13.3	14.6	17.3	3.3
Cornell College.....	12.5	15.0	17.0	3.7
Grinnell College.....	9.9	12.4	15.2	2.8

TABLE 17.—*Number of 60-minute hour recitations per week devoted entirely to freshman and sophomore classes in the same institutions.*

Institutions.	First quartile.	Median.	Third quartile.	Mean deviation.
Junior colleges.....	5.0	8.0	12.7	3.6
University of Iowa.....	3.6	7.8	13.3	4.2
University of Illinois.....	5.7	8.0	10.7	2.8
University of Minnesota.....	5.4	7.5	9.5	2.0
Coe College.....	6.0	9.0	12.5	4.0
Cornell College.....	6.5	8.3	12.5	2.3
Grinnell College.....	6.9	9.3	11.5	2.8

From these data it appears that there is comparatively little difference in the amount of time devoted to freshman and sophomore classes in the different institutions. The median for all of the insti-

tutions considered fall between seven and nine hours per week. This would seem to indicate that the extra amount of work required of junior college instructors is devoted to high school and academy work rather than to the junior college proper. For this reason the above criticism should probably be a little less severe. It should be made clear, however, that in all cases where periods or hours are mentioned in this discussion that a 60-minute hour or "clock hour" is referred to. All shorter periods (45 minutes) were converted into hour periods before used in our tabulations. This means that all periods here referred to as being devoted to high-school work are hour periods. Two hours of laboratory work is considered as the equivalent of one hour of recitation.

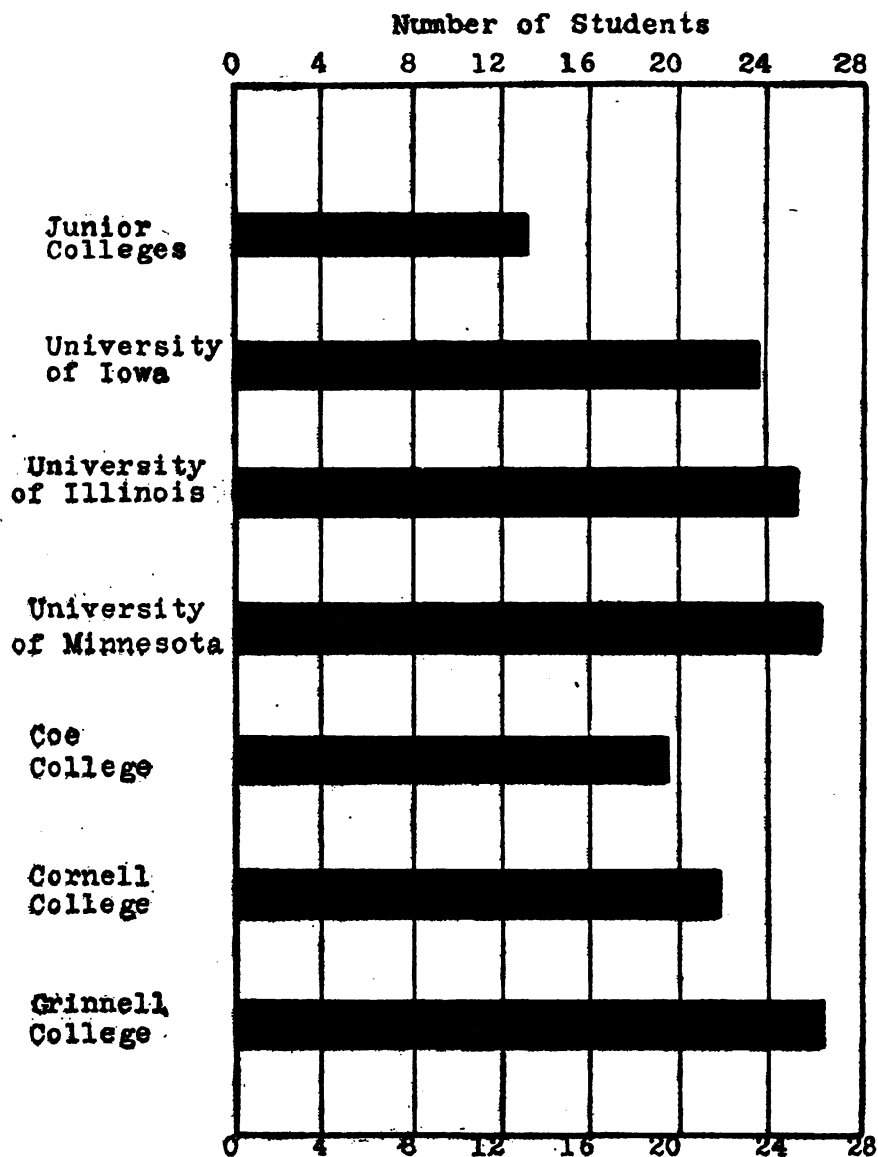
6. THE SIZE OF RECITATION SECTIONS.

The last factor that will be considered in this discussion of the work of the teachers in junior colleges is the size of recitation sections. It will be remembered that one of the arguments frequently offered in support of the small college is that the classes are comparatively small, and hence that the possibilities of personal contact with the instructor are better than in the large classes in the university.

It is evident that before this question can be answered in favor of either type of school we must have something more definite than the terms "small" and "large" on which to base our conclusions. In other words, what are the facts as to the number of students that are permitted to enroll in a single recitation section in the university, and how does this number compare with the number enrolled in the various recitation sections in junior colleges?

The data presented in Table 18, Graph X, and in Appendix are based upon the returns from 66 junior colleges, having a total of 1,648 recitation sections; 3 State universities having a total of 439 recitation sections for freshman and sophomore classes; and from 3 standard colleges having a total of 138 sections for freshman and sophomore classes.

The median enrollment of the recitation sections in the junior colleges is 13, as compared with 29 for the universities and 23 for the standard colleges. Thus, roughly, we may say that the recitation sections in the university are about twice the size of those in the junior college. Further, there is a larger number of large classes (50 students or more) in the universities than in the smaller institutions. Thus less than 1 per cent of the junior classes have more than 50 students, as compared with 2 per cent at the University of Minnesota, 12 per cent at the University of Iowa, and 14 per cent at the University of Illinois. This is of course greatly to the advantage of the junior college.



GRAPH X.—Enrollment in recitation sections of junior colleges as compared with those of standard colleges and universities.

TABLE 18.—*A comparative study of the enrollment of recitation sections of 65 junior colleges with those of the freshman and sophomore classes of certain standard colleges and universities.*

Institutions.	First quartile.	Median.	Third quartile.	Mean deviation.
University of Iowa.....		23.4		12.6
University of Illinois.....	21.1	25.1	29.2	5.5
University of Minnesota.....	18.3	26.0	34.7	10.7
Junior colleges.....	6.6	13.1	21.0	7.6
Coe College.....	12.1	19.4	33.0	10.5
Cornell College.....	15.2	21.7	26.7	8.6
Grinnell College.....	15.4	26.2	36.2	12.3

Even after these differences are pointed out, however, one is forced to admit that the difference is not so great as one might be led to expect, from the amount of discussion in current educational literature on the subject. If these universities have in the past been accustomed to grouping first and second year students in large classes, it is evident that the practice has now been discontinued, for the most part at least. For a majority of the classes there seems to be little difference. We are not certain, for example, that a class of 13 is much better than a class of 26 or even 30, other things being equal. It is probable that classes larger than that are undesirable, but within such limits there is scarcely sufficient grounds for argument.

Table 19 is a summary of the important facts gained from the comparative study of the training and experience and work of the instructors of the junior colleges and that of the instructors of freshman and sophomore classes of certain standard colleges and universities.

From this table we find that the median instructor of the junior college has a bachelor's degree; that he has had a little over a year of graduate work, together with $8\frac{1}{2}$ years of teaching experience; and that he teaches classes enrolling about 13 students to an amount of $16\frac{1}{2}$ periods (clock hours) per week.

The median instructor of freshman and sophomore classes of 3 standard universities has a doctor's degree, $3\frac{1}{2}$ years of graduate work, and 10 years of teaching experience. He teaches 11 hours per week in recitation sections enrolling 29 students.

TABLE 19.—*A comparison of the training experience and work of the instructors of junior colleges as compared with that of the instructors of certain standard colleges and universities.*¹

Institutions.	Degree.	Semesters of graduate work.	Years of teaching experience.	Total hours teaching per week.	Hours in first and second year classes.	Enrollment in each recitation section.
Junior colleges.....	B. A.....	2.5	8.6	16.4	8.0	13
Standard colleges.....	M. A.....	6.0	12.5	14.2	8.5	23
Standard universities.....	Ph. D.....	7.0	10.0	11.0	8.0	29

¹ The figures given in this table are the medians for each type of institution considered. In other words, each institution is here represented by its median instructor.

The median instructor of freshman and sophomore classes of three standard colleges has a master's degree, 3 years of graduate work and 12½ years of teaching experience. He teaches 14 hours each week in recitation sections enrolling 23 students.

If we accept the median instructor of the junior college as representing the minimum standard, and such is certainly sufficiently low, then 50 per cent of the instructors of the junior colleges studied would fail to qualify. As such a standard compares favorably with the standards specified by the various accrediting agencies of the country, these results are certainly significant.

If the median instructor of either the standard college or university were taken as a standard, then fully 75 per cent of the institutions studied would fail to qualify.

It is evident from this investigation that, as far as certain objective standards are concerned, the quality of instruction must be ranked as inferior to that of the three standard colleges and universities which were considered in this report. As stated before, we assume in this case that other things are equal, an assumption which we can neither prove nor disprove. That there are other factors which serve to improve the character of teaching and that these features may vary independently of the objective factors mentioned seems certain. Just what these factors are and how to measure them we are not so sure.

TABLE 20.—*Enrollment in high schools and academies operating in connection with junior colleges for the years 1914-1917.*

Institutions.	1914-15	1915-16	1916-17
Private junior colleges.....	3,817	4,046	4,731
Public junior colleges.....	9,023	10,905	11,754
Total.....	12,840	14,950	16,487

TABLE 21.—*Enrollment by classes in 74 junior colleges for the years 1914-15 to 1916-17.*

Institutions.	1914-15			1915-16			1916-17		
	Fresh-men.	Sopho-mores.	Total.	Fresh-men.	Sopho-mores.	Total.	Fresh-men.	Sopho-mores.	Total.
Private colleges.....	1,099	672	1,771	1,268	797	2,065	1,515	857	2,372
Public colleges.....	485	107	592	932	244	1,196	1,231	306	1,537
Total.....	1,584	779	2,363	2,200	1,041	3,261	2,796	1,163	3,959

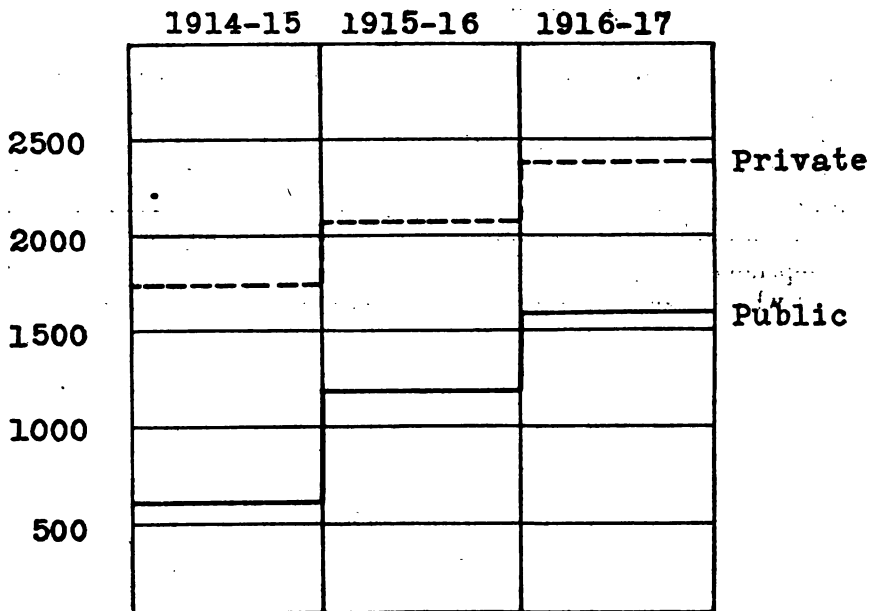
6. ENROLLMENT.

Some indication of the recent growth and present status of the junior college can be found in a study of the enrollment of these institutions from the three years 1914-1917. The data upon which the

following tables are based were obtained from the replies to question 11 of the questionnaire (see Appendix A). An examination of the above table reveals the following facts, which may be of some significance:

1. Each of the 74 junior colleges is operated in connection with either a high school or an academy.

2. The high schools reported in connection with the 19 public junior colleges enrolled for the years 1914, 1915, and 1916 totals of 9,023, 10,905, and 11,745 students, respectively. This is an average of about 580 students for each high school. This shows that for the most part public junior colleges have been established only in the larger towns and cities.



GRAPH XI.—Increase in enrollment in 19 public and 55 private junior colleges for the years 1914-1917.

3. The academies reported in connection with the 55 private junior colleges enrolled for the same years 3,817, 4,046, and 4,731 students, respectively. This is an average of 80 students per school. This indicates that the academies operated in connection with the private junior colleges are very small and are showing little if any growth.

4. The enrollment in the private junior colleges has increased from 1,771 in 1914-15 to 2,372 in 1916-17, an increase of 34 per cent.

5. The enrollment of the public junior colleges has increased from 592 in 1914-15 to 1,587 in 1916-17, an increase of 168 per cent. It should be noted that in each of these cases the increase is partly due to the establishment of new junior colleges. All of the institutions reporting were not in operation in 1914-15.

7. GRADUATES.

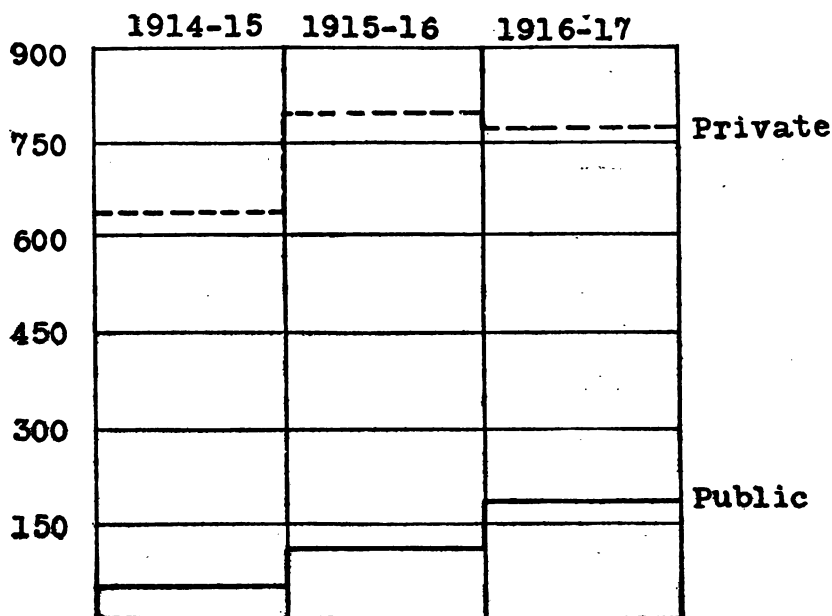
Additional information of importance has been gleaned from the replies to questions 8, 9, and 10 of the questionnaire (see Appendix A). These facts are summed up in the following tables:

TABLE 22.—*Number of graduates of 12 public junior colleges for three years and the number and per cent of these continuing their work in higher institutions.*

Years.	Number graduating.	Number continuing.	Per cent continuing.
1915.....	59	47	80
1916.....	127	100	79
1917.....	184	122	67
Total.....	370	269	73

TABLE 23.—*Number of graduates of 53 private junior colleges for three years and the number and per cent of these continuing their work in higher institutions.*

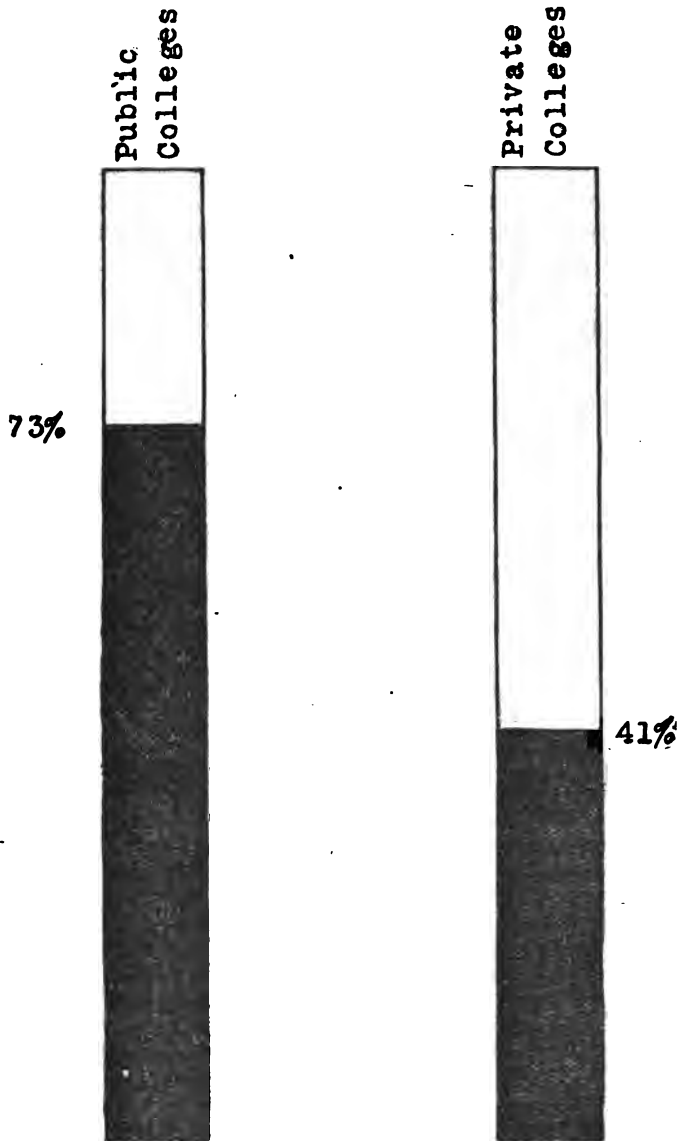
Years.	Number graduating.	Number continuing.	Per cent continuing.
1915.....	649	263	40
1916.....	793	332	42
1917.....	783	315	40
Total.....	2,225	910	41



GRAPH XII.—Increase in number of graduates from 12 public and 53 private junior colleges for the years 1914-1917.

The following points are perhaps of sufficient significance to deserve special mention:

1. Of the 55 private junior colleges replying, 33 grant no degree whatever to their graduates, 15 grant the degree or title of "Associate in Arts," while 5 grant the bachelor's degree. The latter, however, is not given for the completion of merely junior college work.



GRAPH XIII.—Per cent of graduates of 12 public and 53 private junior colleges who continued their work in higher institutions for the years 1914-1917.

2. Of the 19 private junior colleges replying, 18 grant no degree whatever and 1 grants the degree of "Associate in Arts."

3. A total of 59 were graduated from the public junior colleges in 1915, as compared with 184 in 1917, an increase of 211 per cent.

4. A total of 649 were graduated from the private junior colleges in 1915, as compared with 783 in 1917, an increase of about 21 per cent.

5. Of the 370 graduating from the public junior colleges for this period of three years, 269, or 73 per cent, continued their college work in a higher institution.

6. Of the 2,225 graduating from the private junior colleges during the same period of years, only 910, or 41 per cent, continued their college work in a higher institution. This indicates that the private junior college is, for a large per cent of its students, a completion school, and further, that it is much more so than the public college. This point has already been discussed in connection with the course of study.

Chapter V.

ACCREDITING OF JUNIOR COLLEGES.

In this chapter there will be presented a statement of the attempts that have been made to standardize the junior college by various accrediting agencies. The material presented is based for the most part upon the replies of 49 colleges and universities and 36 State departments of education to the questionnaires (see Appendixes B and C). Each State in the Union is represented by at least one reply.

In the outline which follows, the States will be named in alphabetical order, and under each there will be given any legislation that has been enacted relative to the junior college or any standards that have been established by any accrediting agency in the State. The names and addresses of any institutions that have been accredited as junior colleges will also be given.

At the close of the chapter an attempt will be made to sum up all of these regulations into a somewhat detailed definition of a standard junior college.

ARIZONA.

There are no junior colleges in Arizona, but the movement is being agitated. Graduates of the State normal schools are entitled to 30 units blanket credit in the University of Arizona.

ARKANSAS.

The University of Arkansas has approved Crescent College, Eureka Springs, Ark., as a junior college. The only basis of approval that is specified is that the work offered be equivalent to that of the first two years of the university.

It is reported that two other colleges of the State expect soon to become standard junior colleges: Galloway College, Searcy, and Central College, Conway.

CALIFORNIA.

In 1907 the Legislature of California passed the following act:

The high-school board of any high-school district, or trustees of any county high school, may prescribe postgraduate courses of study for the graduates of such high school, or other high schools, which courses of study shall approximate the studies prescribed in the first two years of university courses. The high-school board of any high-school district, or trustee of any high school wherein such postgraduate courses of study are taught, may charge tuition for pupils living without the boundaries of the district or county wherein such courses are taught.

In 1917 the junior college was made a part of the secondary school system by the following enactment:

Junior College May be Established in Districts with a Valuation of \$3,000,000 or More.

The high-school board of any high-school district having an assessed valuation of \$3,000,000 or more may prescribe junior college courses of study, including not more than two years of work, and admit thereto the graduates of such high school, the graduates of other high schools and such other candidates for admission who are at least 21 years of age and are recommended for admission by the principal of the high school maintaining such junior college courses. Junior college courses of study may include such studies as are required for the junior certificate at the University of California, and such other courses of training in the mechanical and industrial arts, household economy, agriculture, civic education, and commerce as the high-school board may deem it advisable to establish.

The Board Shall Adopt Regulations Governing Courses.

The high-school board shall adopt regulations governing the organization of such courses of study and shall prescribe requirements for graduation from such courses; provided that the minimum requirement for graduation from junior college courses of study shall be at least 60 credit-hours of work. A credit-hour is hereby defined as approximately three hours of recitation, study, and laboratory work per week carried through one-half year.

Junior Course May be Given in Any School of the District or in Special School.

Courses of study organized under the provisions of this section may be offered in any or all day and evening high schools of the district, or in a separate junior college, as the high-school board may determine.

Average Attendance Included in Regular High-School Attendance.

The attendance of students enrolled in junior college courses of study shall be kept according to regulations prescribed by the State board of education, and the average daily attendance of such students shall be included in the annual report of the average daily attendance of the high-school district required in section 1743 of the Political Code. The superintendent of schools of each county, in making the annual estimate of county high-school fund required, shall include in the basis of such estimate the average daily attendance of all students enrolled in junior-college courses during the preceding school year. In apportioning the county high-school fund the superintendent of schools of the county shall count the average daily attendance of all students enrolled in junior college courses as a part of the average daily attendance of each high-school district in which such students are enrolled.

Such Average Attendance Shall Call for \$15 per Pupil Transferred from General Fund to State High-School Fund.

The State controller, in making the annual estimate of the amount necessary for the support of high schools, as required in section 1760 of the Political Code, shall include in the basis of his estimate the average daily attendance of all students enrolled in junior college courses, and the superintendent of public instruction, in apportioning the State high-school fund, shall count the average daily attendance of students enrolled in junior college courses as a part of the average daily attendance of each high-school district in which such students are enrolled.

All Courses Subject to Approval of State Board.

All courses of study prescribed in accordance with this section shall be subject to approval by the State board of education, and no State high-school funds shall be apportioned to any high-school district on account of the attendance of students

enrolled in junior college courses unless such courses have been approved by the State board of education.

In May, 1918, the committee on credentials of the University of California published the following statements of requirements to be met by a junior college desiring to be affiliated with the University of California:

MINIMUM REQUIREMENTS.

A. Admission.

The requirements for admission should be the same as those of the University of California (see the Circular of Information, Academic Departments, August, 1917, pp. 98-101). The following statements are especially to be noted: "A graduate of the school (an accredited school), upon the personal recommendation of the principal, accompanied by his certificate that the graduate has satisfactorily completed the studies of the course preparatory to the college he wishes to enter, may, at the discretion of the faculty of such college, be admitted without examination." (1) Recommendations are to be issued only for graduates of the regular courses of the school; (2) recommendations are to be based exclusively upon private "coaching or special examination"; (3) "supplementary" recommendations—for work taken in the high school after the pupil's matriculation in a college or university—are not to be accepted in lieu of matriculation examinations.

B. Curriculum.

The curriculum should include, during each year, at least one course of collegiate grade in each of the groups of subjects required for the junior certificate, viz, English, history, mathematics, foreign languages, and sciences.

C. Equipment.

1. Laboratory—In addition to the equipment necessary for the operation of the laboratory in a high-school science, the junior college should provide the necessary equipment (as indicated in later pages of this bulletin) for the college course or courses in each science that it plans to give. This will normally cost, for each laboratory, from \$1,500 to \$3,000.

2. Library—Additions to the library, with proper reference books, will be indispensable in English and history. A certain number of books for reference purposes will also be needed in each of the other subjects. Lists of desirable books will be supplied by the university upon request.

D. Faculty.

1. A junior college should be prepared upon starting its work to organize a regular staff of at least five instructors chosen with special reference to their ability to give collegiate work. Of these five it will seldom be possible to choose more than three from the high-school staff. Normally each instructor will confine his work in the junior college to one subject, and will devote his remaining time to high-school teaching, preferably in the same subject or in an allied subject.

2. Instructors should be chosen with special reference to their ability to teach; their personality and their preparation in the subject to be taught. For junior college work the master's degree in the subject in which instruction is to be given will be thought of as the normal minimum scholastic requirement.

3. Instructors should not be allowed to carry more than fifteen 1-hour periods, or twenty 45-minute periods of instruction per week. If administrative work is handled, the amount of instruction should be less.

E. Salaries.

In California, junior colleges that have been reasonably successful have paid salaries ranging from \$1,400 to \$2,400 per year. Several institutions have standardized their salaries at \$1,800 to \$1,900 per year. If proper instruction is to be secured, adequate salaries will be absolutely necessary.

The foregoing are the minimum requirements the fulfillment of which will justify the committee on credentials of the University of California in treating a junior college as an affiliated institution. The committee hopes, however, that the junior colleges will not be satisfied with the bare fulfillment of these requirements.

In March, 1918, there were the following junior colleges in California, most of which were fully accredited by the State university:

Anaheim.—Anaheim Union High School.
Auburn.—Placer County High School.
Azusa.—Citrus Union High School.
Bakersfield.—Kern County High School.
Eureka.—Eureka City High School.
Fresno.—Fresno High School.
Fullerton.—Fullerton Union High School.
Hemet.—Hemet Union High School.
Hollywood.—Hollywood High School.
La Jolla.—Bishop's School.
Long Beach.—Long Beach Polytechnic High School.
Los Angeles.—Los Angeles High School.
Ontario.—Chaffey Union High School.
Pomona.—Pomona High School.
Red Bluff.—Red Bluff High School.
Riverside.—Riverside Junior College.
Sacramento.—Sacramento High School.
San Diego.—San Diego High School.
San Luis Obispo.—San Luis Obispo High School.
San Rafael.—Dominican College.
Santa Ana.—Santa Ana High School.
Santa Barbara.—Santa Barbara High School.
Yreka.—Siskiyou Union High School.

GEORGIA.

The State superintendent of schools of Georgia writes:

We have not accredited any of our institutions as junior colleges. In fact, our laws in this State do not authorize us to classify the higher institutions of learning. As a matter of fact, we have several junior colleges in the State, although they are not listed as such.

IDAHO.

The Idaho Technical Institute, Pocatello, Idaho, a State institution, is the only school of junior college rank. There is no special law governing courses except the law that established this institution in 1915. This institution is by law a part of the University of Idaho, and hence receives official recognition by the latter.

ILLINOIS.

The following are the standards and regulations governing the accrediting of junior colleges by the University of Illinois:

STANDARDS.

1. The admission of high-school students to junior college classes should be limited to students of senior standing and of superior scholarship; "superior scholarship" being interpreted to mean a rank within the first third of the class. The number of even these picked high-school seniors in any junior college class should not in any case exceed one-half of the total membership of that class and should ordinarily be limited to one-third the total membership of the class.
2. The teachers in charge of the junior college work in departments other than manual arts should have a bachelor's degree and should have had in addition at least a year of graduate study in the subject of their department in a university of recognized standing.
3. The teaching schedule of any instructor doing junior college work should be limited to a maximum of 20 recitation periods per week (two laboratory periods being counted as equivalent to one recitation period).
4. The junior college course should be organized and conducted on a collegiate as distinguished from a high-school basis. College texts should be used and should be supplemented with reference or other outside work of collegiate character, and the amount of ground covered in a semester approximates that covered in corresponding college course.
5. Junior college classes should be provided with an adequate equipment of space and of available laboratory and library facilities for strictly college work.

REGULATIONS.

1. For work done in junior college classes for which the above standards are approximately met, substantially hour-for-hour credit will be given at the time of the student's admission to the university, provided that the maximum credit allowed shall not exceed 18 hours per semester.
2. For work done in junior college classes for which the above standards are only partially and semisatisfactorily met, substantially three-fourths credit in college hours may be given at the time of the student's admission, provided that the maximum credit allowed shall not exceed 13½ hours per semester.
3. A student who has been given partial credit on admission under the provision of paragraph 2 above may have such partial credit raised to full credit at the end of his first year's work in the university, provided (1) that he continues in the university any specific subject in which he has received partial credit and makes a grade of not less than 85 in that subject, or (2) if he does not continue any specific subject in the university, that he makes an average grade of not less than 85 in all the subjects of his first year's work.
4. For fifth-year or sixth-year work, which is but slightly differentiated by the above criterions from high-school work, substantially one-half credit in college hours may be given at the time of the student's admission, such credit not to exceed 9 hours per semester.

Accredited Junior Colleges. Correct to Nov. 1, 1917.

Blackburn College, Carlinville, Ill.
 Bradley Polytechnic Institute, Peoria, Ill.
 Crane Junior College,¹ Chicago, Ill.
 Ferry Hall, Lake Forest, Ill.
 Frances Shimer School, Mount Carroll, Ill.
 Joliet Junior College,¹ Joliet, Ill.
 Lane Junior College,¹ Chicago, Ill.
 Lewis Institute, Chicago, Ill.
 Loyola University, Chicago, Ill.
 Monticello Seminary, Godfrey, Ill.
 Senn Junior College,¹ Chicago, Ill.

¹ U. S. Bu. of Educ. Bul. 17, 1917.

Junior Colleges Recognized by the State Education Department of Illinois.

An institution to be ranked as a junior college must have at least four teachers giving their entire time to teaching a course of two full years of college grade (the equivalent of 60 semester hours in a recognized college) and shall require for admission not less than 15 secondary units of preparation in a recognized four-year high school, or its equivalent. Students of recognized junior colleges shall be accorded the rights and privileges of the certificating law.¹

Bradley Polytechnic Institute, Peoria, Ill.

Lewis Institute, Chicago, Ill.

Joliet Junior College, Joliet, Ill.

INDIANA.

The University of Indiana specifies the following regulations concerning college work in a high school or junior college:

1. No student should be admitted except those who have completed a high-school course such as to entitle them to admission to the freshman class of the college of liberal arts of Indiana University.

2. The teachers must have a baccalaureate degree from a standard college and should have had, in addition, at least a year of graduate study in the subject of their department in a university of recognized standing.

3. The teaching schedule of any instructor doing college work should be limited to a maximum of 20 recitation periods a week.

4. The course should be organized and conducted on a collegiate as distinguished from a high-school basis, and must be approved by the departments concerned at Indiana University. College texts should be used and should be supplemented with reference or other outside work of collegiate character, and the amount of ground covered in a semester should approximate that covered in corresponding college courses.

5. Classes should be provided with an adequate equipment of space and of available laboratory and library facilities for strictly college work.

6. The faculty recommends that the subjects given be such as to conform to freshman and sophomore requirements at Indiana University.

7. The work and equipment of the school shall be subject to inspection by the university.

8. For work done in accordance with these students equivalent college credit will be given up to a maximum of 30 semester hours for a year (36 weeks) of such work and a maximum of 60 semester hours for two years (72 weeks) or more.

9. Students will be admitted provisionally with the standing indicated in section 8. After a student has done at least one semester's work in residence at Indiana University and has made a satisfactory record the provisional standing will be confirmed and the credit entered upon the permanent record of the student at Indiana University.

To date, only two institutions have been officially recognized as junior colleges by the university:

Vincennes University, Vincennes, Ind.

Central Normal, Danville, Ind.

The high school of East Chicago, Ind., has been accredited for one year of college work.

¹ U. S. Bu. of Educ. Bul. 17, 1917.

IOWA.

The State University of Iowa has given official recognition to one junior college, Graceland College, Lamoni, Iowa. Recently Cedar Valley Seminary, at Osage, Iowa, has been inspected, and it is expected that this institution will be accredited as a junior college in the near future. Two other junior colleges of the State have not been officially accredited:

Denison (High School) Junior College, Denison, Iowa.

Mason City (High School) Junior College, Mason City, Iowa. (Begins regular junior college work in September, 1918.)

KANSAS.

The University of Kansas Senate adopted in 1916 the following regulations concerning the organization and accrediting of junior colleges in Kansas:

The University of Kansas approves of the idea of the junior college and recognizes it as one of the prominent and important ideas in the trend of education to-day. The university will, therefore, gladly cooperate and advise in every way possible with any educational organization which may contemplate the formation of a junior college.

A junior college must do its work after the manner of a college and must adopt the aims and ideals of a college. This means that the work of a junior college shall be far different from the work of a postgraduate course in a high school or academy. It is necessary that there be a sharp differentiation between the work of the secondary school and that of the junior college, and when the junior college is organized in connection with a high school or academy it is essential that the teaching force of the college be substantially different from that of the secondary school and that adequate library and laboratory facilities be provided for work of college grade. It should be distinctly understood that a junior college is really a college; and that no high school, however large or however well equipped, is in any sense a junior college. The teaching force, equipment, and financial support of a junior college must satisfy the requirements for colleges of the North Central Association of Colleges and Secondary Schools.

It is to be noted that the maintenance of a junior college will involve an expenditure greatly in excess of the expenses of an ordinary high school. Therefore, before organizing a junior college, the community should carefully consider its financial ability to maintain such an institution without impairing the character of the work in the elementary and secondary schools.

Every junior college in the State of Kansas will be visited by a university committee before its work is approved and accredited by the university, and it shall be visited as often thereafter as may seem desirable to the committee.

One institution has been officially accredited as a junior college—Oswego College for Ladies, Oswego, Kans. Several other junior colleges have requested inspection and will be visited this year.

STANDARDS ADOPTED BY THE STATE BOARD OF EDUCATION, JUNE 27, 1917.

In order to obtain the approval of the State board of education the high-school extension (junior college) provided for by chapter 283 of the Laws of 1917 must conform to the following standards:

1. *Buildings.*

Either a separate building or suitable rooms in the high-school building shall be reserved for the exclusive or principal use of the college classes. The building or rooms thus provided shall be appropriately furnished, in keeping with the purpose for which they are to be used, so as to give suitable accommodations in respect to capacity, convenience, health, and tasteful appearance.

2. *Equipment.*

(a) *Library.*—There shall be, in addition to the ordinary high-school library, a library of not less than 500 volumes relating to the work of each year, a total of 1,000 volumes for schools maintaining a two-year college course, selected with particular reference to the needs of college teachers and students. The library shall have a complete card catalogue and be under the supervision of a person qualified to do such work.

(b) *Laboratories.*—For the scientific courses laboratories must be provided and apparatus supplied at an initial cost, for groups of 10 to 20 students, of approximately \$1,000 for physics; \$500 each for agriculture, botany, chemistry, or zoology. Laboratories shall be furnished with gas, water, and electricity, at whatever additional expense may be necessary.

(c) *Maps, etc.*—For courses in history, language, and literature adequate equipment of maps, pictures, and other illustrative material must be provided.

3. *Departments of Instruction.*

For a two-year course of study instruction shall be provided as follows:

(a) *English.*—A course in rhetoric and composition and a course in English literature. These must follow a standard three-year high-school course in English, and may properly be expanded so as to follow a four-year high-school course.

(b) *Mathematics.*—A two-year course, including college algebra, solid geometry, trigonometry, and analytical geometry, following a two-year course in high-school mathematics.

(c) *History.*—A course of one or two years, including one or more of the following: Modern European history, advanced English history, and nineteenth century American history.

The courses in history must not be a repetition or duplication of the history courses given in the ordinary high-school classes.

(d) *Science.*—One or two years in science selected from the following: Agriculture, botany, chemistry, physics, zoology.

A course of one year in each of at least two sciences should be offered.

(e) *Foreign Languages.*—Instruction in two or more languages must be provided for, selected from Greek, Latin, French, German, Portuguese, and Spanish. These courses should be either for beginners or for these students who have taken preliminary language courses in the high school.

(f) *Elementary Education.*—In the second college year courses may be offered in general psychology, methods of teaching, and school management, the two latter being restricted to students who are definitely preparing to teach.

4. *Recitation Periods.*

In college classes the recitation period shall be 60 minutes, deducting therefrom the time needed for the changing of classes. Laboratory periods shall be twice as long as the recitation period.

5. *Separation of Classes.*

There shall be a distinct separation between high-school and college classes. In certain subjects, however, which are essentially the same except in the rate of progress whether taught in high school or college, e. g., solid geometry and elementary courses in language, the combination of students of different classification is permissible to a limited extent, but in no such case shall students be grouped together if there is a difference in more than one year in their classification; and if any college student is enrolled in a high-school class the semester hours of college credit allowed shall not be more than one-half the number of recitation hours in any semester.

6. *Instruction.*

(a) *Administration.*—The superintendent of schools, when the junior college is a part of the public-school system, shall be recognized as the chief administrative officer.

(b) *Preparation of Teachers.*—The standard for teachers, including the superintendent and principal, shall be the completion of at least one year of advanced study following a college course leading to the bachelor's degree. In addition to the above requirements all junior college teachers shall hold legal certificates for high-school teaching.

(c) *College Faculty.*—The college faculty shall include at least one specially qualified person with the preparation above mentioned for each of at least four of the college departments of instruction.

(d) *Amount of Teaching.*—No college instructor shall teach more than four classes daily.

7. *Salaries.*

The salary of each college teacher shall be not less than \$1,200 per year.

8. *Admission of Students*

Graduation from the four-year course prescribed for accredited high schools by the State board of education shall be required for unconditional admission to the first year of the college course.

9. *Credits.*

College credits are to be given in semester hours, one semester hour being one hour of recitation per week for 18 weeks. The amount of credit given for one full year's work shall not exceed 32 semester hours, and for two years' work it shall not exceed 64 semester hours.

10. *Recognition.*

The junior college will be subject to inspection by the State board of education, and when approved by the board in respect to buildings, equipment, instructors, and instruction, credits given to students will be recognized and may be applied on the requirements for State teachers' certificate and may be transferred to accredited colleges having four-year courses.

No junior college shall be organized with fewer than 15 students in the first year or 25 students in the first and second years of the college course. When the attendance in the college shall fall below 10 students in the first year or 15 students in the first and second years for a period of nine weeks, such school shall cease to be accredited for college work.

The State board of education desires to make clear the necessity for distinguishing between high-school instruction and junior-college instruction. The increased requirements mentioned above in laboratories, libraries, and preparation of instructors are all intended to make the grade of instruction not only stronger than instruction in the high school, but different in scope and character. In other words, instruction in the junior college must be of the college rank.

KENTUCKY.

The State high-school supervisor of Kentucky plans to attempt a standardization of the junior colleges of this State during the coming year.

The Kentucky Association of Colleges and Universities adopted in 1915 the following plan for the accrediting of junior colleges:

SECTION 1. That the Kentucky Association of Colleges and Universities arrange to formally recognize junior colleges and provide for an accredited relation similar to that now provided for preparatory schools.

SEC. 2. That a junior college, in order to receive this formal recognition and to sustain the accredited relation, must conform to the following requirements:

(a) The college must be the essential part of the curriculum of any institution recognized as a junior college; that is, the greater emphasis must be placed upon the work of the college grade. The institution must not be primarily a high school with two years of advanced grade. Junior colleges must publish in their annual catalogues a classified list of all their students.

(b) If a preparatory department is maintained, its work must be approved by this association.

(c) The minimum requirements for admission to the college classes must correspond with the present requirements of this association.

(d) For recognition as a graduate from the junior college a student must complete satisfactorily 30-year or 60-semester hours of work equivalent to that given in the freshman and sophomore years of standard colleges belonging to this association. The standard colleges of this association are to grant full junior standing or 30-year hours of college credit and no more to such graduates. Nongraduate students from accredited junior colleges will be given in the standard colleges of this association standing equivalent to that obtained in the junior college.

(e) No junior college shall confer any baccalaureate degree. A junior diploma may be given.

(f) The number of teachers, their training, the amount of work assigned to them, the number of college students, the content of the college courses, the methods of instruction, and the resources and equipment of the junior college are all vital factors in fixing the standards of an institution and must be considered by the executive committee in recommending any institution for accredited relations. In particular, the library and laboratory facilities should be adequate to the needs of the college courses offered.

SEC. 3. That the executive committee of this association shall formulate and make known more specifically the requirements to be met by institutions seeking this accredited relation and provide for recognition of junior colleges located in other States.

SEC. 4. To be granted recognition by this association the institution desiring the accredited relation must make formal application to the executive committee and furnish on blanks prepared for this purpose definite information on the subject referred to in section 2, subsection (f) above; and an institution shall be recommended for the accredited relation only after personal inspection by members of the executive committee, whose expenses shall be paid by the institution visited.

SEC. 5. List of the accredited junior colleges in Kentucky, to be revised as occasion may require, shall be published by the executive committee, and printed also in the catalogues of the colleges of this institution.

SEC. 6. That officers and members of the faculties of junior colleges in Kentucky accredited by the association and the principals and superintendents of accredited high schools in Kentucky be admitted to associate membership in this association with all of the privileges except that of voting.

SEC. 7. Application of junior colleges to this association for the accredited relation must be filed with the secretary of the association on or before January 1 in any year, to be acted upon by the association at its annual meeting in December following.

MICHIGAN.

Act 146 of the Michigan State Legislature for 1917 provides as follows:

The board of education in any school district of this State having a population of more than 30,000 people, according to the last official census of the United States Government, is hereby authorized and empowered to provide for the establishing and offering in such district of advanced courses of study for high-school graduates, which courses shall not embrace more than two years of collegiate work. Such courses collectively shall be known and designated as the junior collegiate department of the district school system. The board of education shall provide suitable instructors therefor and shall adopt regulations with reference to the admission and conduct of pupils taking such courses and the issuance of diplomas upon the completion thereof: *Provided, however*, That no student who is not a graduate of a high school offering four years of work in this State shall be admitted to any of such courses.

The University of Michigan has approved the work of three junior colleges of that State:

Grand Rapids (Central High School) Junior College, Grand Rapids.
Detroit (Central High School) Junior College, Detroit.
Martindale Normal School, Detroit.

MINNESOTA.

The University of Minnesota adopted in February, 1916, the following standards for judging schools offering one or two years of college work:

STANDARDS FOR JUDGING MINNESOTA SCHOOLS OFFERING ONE OR TWO YEARS OF COLLEGE WORK.

Under the conditions hereinafter specified the university will recognize, toward advanced standing, credits earned in a school giving a college course in part, provided such school complies with the following regulations:

A. GENERAL CONDITIONS.

1. *Amount of work to be recognized.*—The maximum amount of college work to be recognized shall be two years, but in no case shall a second year's work be recognized until a school has for a reasonable length of time demonstrated its ability to do the first year's work satisfactorily.

2. *Limit to length of time of recognition.*—The normal period of recognition shall be one year. Renewals shall be subject to the continued compliance of the school with the standards.

3. *Reports.*—The registrar shall compile a report for each school recognized for advanced credit, such report to show the record of each student in each subject taken in the university.

B. SPECIFIC REGULATIONS.

1. *Applications.*—Application for recognition should be made to the committee on the relation of the university to other institutions of learning before May 1 preceding the year in which work is given for which recognition is desired.

2. *Courses to be offered at the school.*—At least one full year of college work—that is, 14 to 16 credits—must be offered, consisting of courses in at least four subjects, with at least one subject in each of the three groups—language, science and mathematics, social sciences.

3. *Students*.—Students admitted to these courses must be graduates of secondary schools accredited to the university. See also c (1), (a).

4. *Teachers*.—(a) *Training and experience*.—All persons giving instruction in such courses shall have done at least one full year's work in a recognized graduate school (ordinarily one year of graduate work in addition to at least two years of undergraduate study in the subject taught) with special attention to the subjects which they teach, and they must also have at least two years' successful experience as high-school teachers or acceptable experience as college teachers.

(b) *Subjects and hours*.—Each instructor shall teach not more than two subjects in the college division, and shall not teach more than one 5-period class in the high school. When, in the opinion of the committee, the college enrollment warrants, he shall give his full time to college teaching. The total amount of his classroom work shall be not more than 17 hours.

(c) The work of the instructor shall show evidence of ability to stimulate and hold the interest of his students, so that they shall attain a mastery of and a proper attitude of mind toward the subject taught.

5. *Library and equipment*.—Each department shall be provided with books and apparatus sufficient to carry on its work in a proper manner. The books may be in part in a city library, if they can be drawn out for students' use under suitable regulations. For the information of the teacher, to maintain his interest and to keep him in touch with the subject, the list of books must include both large reference works and two or three periodicals representing scientific or research activity in the subject. Provision must be made for reasonable addition to the library, involving an annual expenditure of from \$15 to \$75 for each study, depending upon the original equipment available and the nature of the subject.

6. *Inspection*.—Equipment and work of departments in such schools shall be inspected by qualified representatives of the corresponding university departments, appointed by the committee on the relation of the university to other institutions of learning after consultation with the departments. These representatives shall report their findings to the committee.

At the present time five of our high schools have expanded their work to include one or two years of college studies, namely, the following:

Cloquet Junior College, Cloquet, Minn.
Hibbing Junior College, Hibbing, Minn.
Jackson Junior College, Jackson, Minn.
Rochester Junior College, Rochester, Minn.
Faribault Junior College, Faribault, Minn.

A number of private schools are also working on this same basis, and at the present time the work in the following schools is recognized:

Stanley College, Minneapolis, Minn.
Villa St. Scholastica, Duluth, Minn.
St. Benedict's College, St. Joseph, Minn.
St. John's College, Collegeville, Minn.

Two classes of graduates from the Minnesota normal schools are accepted at the University of Minnesota: (1) Graduates of the advanced graduate course (two years above high-school graduation); (2) graduates of the advanced English or Latin course (five years). The college of education of the University of Minnesota grants 60 credits to graduates of class 1 and 42 credits to those in class 2. The college of science, literature, and the arts grants 30 credits to students of both classes, with the provision that those in class 2 have the special recommendation of the normal school president and be of mature years.¹

Duluth State Normal School.
Mankato State Normal School.
Moorehead State Normal School.
St. Cloud State Normal School.
Winona State Normal School.

¹ U. S. Bu. of Educ., Bull. 17, 1917.

MISSISSIPPI.

Several of the denominational colleges for women are endeavoring to be genuine junior colleges. None have been officially accredited to date by the University of Mississippi.

MISSOURI.

The plan of crediting junior colleges in Missouri is in the hands of the State university. The following are the conditions for accrediting as revised in February, 1918:

GENERAL REGULATIONS FOR ACCREDITING.

The minimum requirements which a junior college must meet in order to be accredited are as follows:

1. The requirements for admission to the work of the college must be the equivalent of those of the college of arts and science in the University of Missouri.

High-school subjects which are required for admission are designated in terms of "units." A unit is the equivalent of a subject pursued five 40-minute periods a week for at least 36 weeks, except that in the cases of physical and biological sciences and certain other subjects, two or more of the five periods each week must be double periods. For these exceptions and further information, see the description of units in annual catalogue.

Fifteen units, the equivalent of a four years' high-school course, are required for entrance to the college of arts and science. Three units in English, one unit in mathematics, and two units in one foreign language are fixed requirements, with exception that graduates of secondary schools fully accredited by the University of Missouri are admitted without reference to these fixed requirements. The remaining nine units may be selected from the following list, in which is indicated the maximum and minimum number of units accepted in each subject.

Units accepted by the University of Missouri.

Subjects.	Maximum.	Minimum.
English.....	4	3
Algebra (elementary).....	1½	1
Plane geometry.....	1	1
Solid geometry.....	½	½
Plane trigonometry.....	½	½
Arithmetic (advanced) ¹	½	½
Algebra (advanced) ¹	½	½
History.....	4	1
American Government.....	½	½
Latin.....	4	2
Greek.....	3	2
German.....	3	2
French.....	3	2
Spanish.....	3	2
Physics.....	2	1
Chemistry.....	2	1
General biology.....	1	1
Botany.....	2	1
Zoology.....	2	1
Physiology.....	1	1
Physical geography.....	1	½
Agriculture.....	2	1
Music.....	1	½
Drawing.....	2	1
Manual training.....	2	1
Domestic science and art.....	2	1
Economics.....	½	½
Commercial geography.....	½	½
Bookkeeping.....	1	½
Stenography and typewriting.....	1	1
Teacher-training course.....	2	2

¹ Must be preceded by elementary algebra and plane geometry. Advanced arithmetic and advanced algebra can not be offered together.

For further information, including list of accredited secondary schools, etc., see annual catalogue.

2. If a preparatory school is maintained in connection with the college, its work must be approved by the University of Missouri.

3. The course of study in the college must be two years in length, and the college year 36 weeks.

4. For graduation from the college, the student must complete satisfactorily 60 hours of work, which must be the equivalent of that required in the first two years in the college of arts and science in the University of Missouri. The specific requirements are as follows: (a) Six hours of English; (b) five hours of history; (c) ten hours of one foreign language; (d) three hours of mathematics or logic; (e) five hours of physical science (chemistry, physics, astronomy, geology, and geography); (f) five hours of biological science (botany, zoology).

These requirements may be waived on the following conditions: If the student presents three units for entrance in the requirement (b) or (d), or two units in the requirement (e) or (f), he will be excused from that requirement. If the student presents three units for entrance in one foreign language, he will be excused from five hours of the requirement (c), and if the student is prepared to enter the second course in a foreign language, he may fulfill the requirement by taking, in addition to this second course, five hours of another foreign language. Such exemptions do not excuse the student from the requirement of a total of 60 hours for graduation.

By an hour is meant a 60-minute period of class work, or a 120-minute period of laboratory work (exclusive of preparatory instruction and study, work upon notebooks that can be done outside of laboratory, etc.) each week for one semester.

5. Students shall not be permitted to carry for credit work amounting to more than 16 hours a week.

6. There must be a sufficient number of teachers to conduct the work without crowding the classes, or without assigning to individual teachers an excessive amount or variety of work.

7. All college teachers should have had training equivalent to four years' work in a standard college, and it is desirable that they should have completed one year's graduate work.

8. There must be a laboratory for physical science and a laboratory for biological science, each adequately equipped and sufficiently large to permit easily of individual work upon the part of the students.

9. There must be an adequate library equipment.

10. The college must give satisfactory instruction in the work specified in the fourth requirement, and in addition must give satisfactory instruction in other courses which the student may take in completing the conditions for graduation.

The following institutions have been recognized as accredited junior colleges by the University of Missouri:

Central College for Women, Lexington.

Christian College, Columbia.

Cottey College, Nevada.

Hardin College, Mexico.

Howard-Payne College, Fayette.

Kansas City Junior College.

Lindenwood College for Women, St. Charles.

Palmer College, Albany.

Pritchett College, Glasgow.

St. Joseph Junior College, St. Joseph.

Stephens College, Columbia.

Synodical College, Fulton.

The Principia, St. Louis.

William Woods College, Fulton.

MONTANA.

The State Legislature of Montana recently killed a bill providing for junior-college work.

NORTH CAROLINA.

Two colleges in North Carolina offer two years each of college grade work—Weaver College, at Weaverville, and St. Mary's College, at Raleigh. Students completing the work at either of these institutions are given advanced credit by the University of North Carolina, but not full standing. Those entering the bachelor of arts course are required to make good any deficiencies in their work as compared with that of the first two years of the university. Those entering the bachelor of science (all technical) courses are required to spend not less than three years at the university in addition to the two years in the junior college.

NORTH DAKOTA.

There are no so-called junior colleges in the State, but recognition and credit are given for work done by several State schools of a character equivalent to that of the junior college. The State university has made the following arrangements:

Students entering from the State Science School at Wahpeton receive credit for admission and advanced credit up to two years of college work on certificate.

Students entering from the State Normal and Industrial School at Ellendale and the School of Forestry at Bottineau receive the same credit as students entering from the State school at Wahpeton.

Students entering from the State normal schools at Valley City, Minot, and Mayville, and other normals of equal rank, are granted advanced standing as follows: (1) Graduates from the one-year professional course who are also graduates of first-class high schools are granted 30 semester hours of advanced standing. Graduates from the two-year professional course who are also graduates of first-class high schools are granted 60 hours of advanced standing. In either case students must fulfill our requirements for admission and offer subjects for advanced standing that are in harmony with the group requirements for graduation. (2) Students who are not high-school graduates but have completed the regular four-year or five-year normal course are given 15 and 45 credits, respectively.

Students entering from Fargo College, at Fargo, and Jamestown College, at Jamestown, are allowed credit for admission and also for advanced standing by certificate, their credits being accepted at full value.

NEBRASKA.

There are no institutions in the State which are designated junior colleges. There are, however, certain schools doing two years of collegiate work which are inspected and approved on the same basis as the colleges, and whose graduates are also given the advantage of certification by the department of public instruction.¹

Chadron State Normal School.
Fremont College, Fremont.

Kearney State Normal School.
Wayne State Normal School.

¹ U. S. Bu. of Educ. Bul. 17, 1917.

OHIO.

The State Department of Public Instruction of Ohio reports that there has been no official action taken by that State with reference to junior colleges. It adds, however, that the Ohio Mechanics Institute at Cincinnati has definitely taken the rank of a junior college and that Rio Grande College and Franklin and Ashland College have been advised to do the same. Ohio State University is reported as favoring the junior-college idea.

OKLAHOMA.

The normal schools and one collegiate institution of the State are recognized as junior colleges. Their graduates are given credit in the University of Oklahoma for such work of the freshman and sophomore years as they have completed. The recognition of these schools and the method of admitting their students to the university correspond to the practice in the case of the colleges.¹

Central State Normal School, Edmond.

Colored Agricultural and Normal University, Langston.

East Central State Normal School, Ada.

Northeastern State Normal School, Tahlequah.

Northwestern State Normal School, Alva.

Southeastern State Normal School, Durant.

Southwestern State Normal School, Weatherford.

Oklahoma College for Women, Chickasha.

SOUTH DAKOTA.

No official action. Two institutions in the State rate themselves as junior colleges:

Wessington Springs Junior College.

All Saints High School, Sioux Falls.

TEXAS.

The State Legislature of Texas has recognized the junior colleges of that State in the following enactment:

A person who has satisfactorily completed four full courses in the college of arts and one full course in the department of education of the University of Texas or in any college or university, or in any junior college in Texas ranked as first class by the State superintendent of public instruction upon the recommendation of the State board of examiners, shall, upon presentation of satisfactory evidence of having done the required work, be entitled to receive from the State department of education, a State first-grade certificate valid until the fourth anniversary of the 31st day of August of the calendar year in which the certificate was issued, unless canceled by lawful authority.

Any school applying for approval under the provisions of this act shall pay a fee of \$25, and each applicant for teacher's certificate on college credentials shall pay a fee of \$1, to cover the expenses of inspection and standardization of approved colleges.

It shall be the duty of the State superintendent of public instruction to appoint a suitable person or persons of recognized college standing, who shall make a thorough inspection of the equipment and standards of instruction maintained in each school

¹ U. S. Bu. of Educ., Bul. 17, 1917.

applying for approval under this act, and who shall make a detailed report to the State board of examiners for their consideration before any recommendation is made to the State superintendent of public instruction for his approval.

The State superintendent shall have each school receiving the benefits of this act thoroughly inspected from year to year as to its standards and facilities of instruction, and he shall have authority to suspend any school from the benefits of this act which fails for any reason to maintain the approved standards of classification.

The State department of education has adopted the following minimum requirements for a junior college of the first class:

1. *Restriction as to name.*—It is preferred that the word "junior" be prefixed by an institution when applying to itself the term "college" and that the work of the college be restricted as hereinafter defined.

2. *Scope of work.*—A junior college shall be an institution that does two years of college work that shall correspond to the first two years of the standard college.

3. *Entrance requirements.*—The requirements for admission to the junior college classes must correspond with the present requirements to the standard college. The junior college records must show how all entrance units have been absolved.

4. *Limitation.*—No junior college shall confer any baccalaureate degree. A junior diploma may be awarded.

5. *Requirements for graduation.*—For graduation from a junior college a student must complete satisfactorily 30 year-hours or 60 semester-hours of work equivalent to that given in the freshman and sophomore years of the standard college. During each year the student may not complete, as a rule, more than one-half of the work required for graduation, except when satisfying entrance requirements.

6. *Requirements for teacher's certificate.*—One course, or year's work, in each of the following subjects: English, history, mathematics, education, science or a foreign language.

7. *The preparatory school.*—If a preparatory school is maintained in connection with the institution, its work must correspond, in so far as it extends, to that of the standard high school, and must be approved by the State department of education. When students are passed from the preparatory school to the junior-college classes, the records must show when, where, and how every unit of work necessary to satisfy entrance requirements has been absolved. These entrance units can be absolved only by work done in a recognized high school, by work in the preparatory school, or by examination. If entrance units are absolved by examination, copies of examination questions, together with examination papers submitted by applicant, must be made part of the records of the college, subject to inspection by the department of education.

8. *Number of departments.*—At least five departments, in each of which are offered two years of standard college work, must be maintained. Four of these departments must be English, history, mathematics, and education. The other may be selected from the following subjects: Science, Latin, a modern language.

9. *Organization of departments.*—The faculty must consist of not fewer than five professors who are heads of departments. It will sometimes be necessary for a professor to teach subjects in more than one department. All the work offered in one department, however, must be taught by one professor, unless there is more work in this department than he can satisfactorily do.

10. *Training of the faculty.*—All teachers in junior colleges must be graduates of standard colleges or be teachers of proved teaching ability. At least half of the heads of departments must have had a year's work in some standard college in advance of the bachelor's degree.

11. *Number of classroom hours per teacher.*—No teacher should be required to do more than 20 hours per week of classroom work.

12. *Laboratories.*—If courses are offered in science, there should be laboratory equipment sufficient for students to make all experiments outlined in all such courses offered by the college.

13. *Library.*—The library should contain at least 2,000 carefully selected volumes.

14. *Material equipment.*—The location and construction of the buildings, and lighting, heating, and ventilation of the rooms, the nature of the laboratories, corridors, closets, water supply, school furniture, apparatus, and methods of cleaning shall be such as to insure hygienic conditions for both students and teachers.

15. *Support.*—The financial support must be adequate to meet the expenses of the institution.

16. *Salaries.*—The matter of salary is fundamental and is one of the criteria by which the quality of instruction may be determined.

17. *Number of students in classes.*—The number of students in recitation sections should be limited to 30. Laboratory sections should be smaller. If larger classes are permitted by the president, it will seriously impair the standing of the college.

18. *General statement concerning curriculum and spirit of administration.*—The character of the curriculum, the efficiency of instruction, the scientific spirit, and the standard of work shall be factors in determining the standing of the institution.

19. *Standing with other educational institutions.*—All courses offered by the junior college should be given in such way that full credit will be given for them in standard colleges. If these courses are based on textbooks, college texts must be used.

Under these requirements the following institutions have been recognized as junior colleges:

Institutions in Texas recognized as junior colleges by the State department of education.

Institution.	Location.	President.
Ablene Christian College.....	Ablene.....	J. P. Sewell.
Alexander College.....	Jacksonville.....	W. K. Strather.
Burleson College.....	Greenville.....	B. E. Masters.
Clarendon College.....	Clarendon.....	G. S. Slover.
Midland College.....	Midland.....	F. G. Jones.
Meridian Junior College.....	Meridian.....	G. F. Winfield.
Our Lady of the Lake College.....	San Antonio.....	Rev. H. A. Constantinean.
North Texas Female College.....	Sherman.....	J. O. Leath.
Wesley College.....	Greenville.....	S. E. Green.
Stamford Junior College.....	Stamford.....	J. W. Hunt.
The College of Marshall.....	Marshall.....	H. E. Watter.
Thorp Spring Christian College.....	Thorp Spring.....	C. R. Nichol.
Wayland Baptist College.....	Plainview.....	H. E. L. Farmer.
Westminster College.....	Tehuacana.....	J. C. Williams.

The college section of the State Teachers' Association has adopted the following minimum requirements for a junior college:

1. It should require not less than 14 standard units for entrance.

2. It should add thereto two years of college work or fifteen 60-minute hours per week of recitations each year.

3. If courses are offered in science, above the academy, then it should have laboratory equipment sufficient for all the experiments called for by such courses—sufficiency to be measured by the value of the apparatus, which shall be, in chemistry not less than \$1,000, in physics not less than \$2,000, in biology not less than \$1,500.

4. It should have a library of not fewer than 2,000 volumes bearing specifically upon the subjects taught.

5. It should maintain at least five departments, with a professor exclusively in charge of each. In the nature of the case, other teachers would be required. They

might be assistant professors or instructors in more than one department each. As speedily as possible such schools should go from five to six and seven, and even more, full professors. The library and laboratories should not lag in constant growth.

6. No teacher should be required to do more than 25 hours per week of classroom work.

7. No student should be allowed to do more than 15 hours of classroom work per week on a basis of 60 year-hours for graduation, i. e., as a rule the student should be allowed only one-fourth of his degree work per year, unless a student is a conditioned freshman with only half of his work in advance. A student may take, in addition to 15 hours, a given amount of music or other fine arts.

8. The equipment of the teachers should be approximately equal to that of college teachers.

Under these provisions the following institutions have been classified as junior colleges:

Abilene Christian College, Abilene (no science approved).
 Alexander College, Jacksonville (chemistry only science approved).
 Burleson College, Greenville (chemistry and physics only science approved).
 Clarendon College, Clarendon (chemistry only science approved).
 Decatur Baptist College, Decatur (no science approved).
 Meridian College, Meridian (chemistry only science approved).
 North Texas Female College, Sherman (no science approved).
 St. Mary's College, Dallas (no science approved).
 San Antonio Female College, San Antonio (no science approved).
 Stamford College, Stamford (physics only science approved).
 Texas Military College, Terrell (no science approved).
 Thorp Spring Christian College (no science approved).
 Wesley College, Greenville (chemistry and physics only science approved).
 Westminster College, Tehuacana (no science approved).

Class B:

Goodnight Baptist College, Goodnight (no science approved).
 John Tarleton College, Stephenville (chemistry only science approved).
 Midland College, Midland (no science approved).

UTAH.

The State Department of Public Instruction of Utah has appointed a special committee to consider the problem of two years of work in the normal schools of the State. The tentative standards drawn up by this committee are as follows:

1. The completion of a standard four-year secondary course above the eighth grade shall be required for entrance.

2. The completion of two full years of additional work, including adequate training in educational subjects, a thorough review of the common branches, and practice teaching in a training school shall be required for graduation.

3. The number of class hours for the heads of the departments and for students shall not exceed 20 a week.

4. A faculty properly qualified shall be provided, consisting entirely of graduates of standard colleges; and each head of a department shall hold at least a master's degree from a standard college, or have attained eminent success as a teacher, which success shall be determined by the State board of education.

5. A well-equipped training school for observation and practice shall be maintained, such school to cover work in the eight elementary grades.

6. The library shall consist of at least 5,000 volumes, selected with reference to normal school subjects, and exclusive of public documents.
7. The laboratory equipment shall be adequate for all laboratory courses offered.

VIRGINIA.

An institution to be registered as a junior college by the State Board of Education of Virginia must present satisfactory evidence that it is doing at least the freshman and sophomore work of a standard college. The junior college may confer a diploma of graduation, but shall not confer any titled degree.

Daleville College, Daleville.
 Marion College, Marion.
 Mary Baldwin Seminary, Staunton.
 Southern College, Petersburg.
 Stonewall Jackson College, Abingdon.
 Sullins College, Bristol.
 Virginia College, Roanoke.
 Virginia Intermont College, Bristol.
 Virginia Union University (colored), Richmond.

The following minimum requirements for a junior college were adopted by the Association of Virginia Colleges, February 23, 1918:

1. It should require not less than 14 units for entrance to its college department.
2. College methods and college texts should be used in its college department.
3. The preparatory department must be approved by proper accrediting agencies.
4. The course of study in the college must be two years in length, and for graduation 60 semester hours of work required.
5. Students shall not carry for credit, work amounting to more than 16 hours per week, except to remove conditions.
6. It should maintain at least five departments with a specialist at the head of each.
7. All college teachers should have the bachelor's degree from a college of high grade, and it is desirable that each should have the equivalent of a year's study in his special line.
8. No teacher shall be required to do more than 20 hours' classroom work per week.
9. There must be a laboratory for teaching science, adequately equipped for individual work upon the part of students. Minimum suggested: Chemistry, \$1,500; biology, \$1,500; physics, \$2,000.
10. There must be adequate library equipment. Suggestion, 2,000 volumes.
11. The number of college students should be not less than 10 per cent of the total attendance of regular academic students, and in no case fewer than 20.
12. As far as practicable the college students should be segregated from the preparatory students.
13. It shall confer no degrees.

WASHINGTON.

The University of Washington has accredited one institution—the Forest Ridge Academy, of Seattle, for two years' junior college work. The high school at Everett gives a fifth year in modern language, history, biological and physical science, mathematics, and English, all of which is accepted by the university as college work. Two or three other institutions in the State have asked to be inspected with a view of being accredited as junior colleges, but no action has been taken as yet.

WEST VIRGINIA.

The State Board of Regents of West Virginia reports that a school code commission is now at work on a revision of the school laws of the State which will cover fully the subject of junior colleges. It is stated that everything indicates a rapid growth in number and importance of such institutions in that State.

The board of regents of West Virginia University passed in January, 1918, the following conditions whereby university credit could be received for work done in the State normal schools:

When the students have completed a four-year high-school course, or its equivalent, before entering upon the two years of advanced work required for graduation from the normal schools, credit not to exceed 12 hours in any one branch, or 27 hours for one year's work, or 54 hours in all, will be allowed for work done under the following conditions:

1. Work to be done by teachers who have completed at least one year of graduate work, in addition to graduation from a standard college or university. (By order of the board, others who have had long experience and acquired efficiency by their own efforts may be admitted to this list, even if the above amount of credit work has not been done in actual school attendance.)
2. Work to be done in classes composed entirely of students who have completed a standard high-school course or its equivalent.
3. Work to be advanced work in reality and not additional high-school work.
4. Textbooks, library, and laboratory facilities to be of such character, kind, and amount as are necessary for work of college grade. Heads of departments at the university will always be ready to help and advise in regard to these items.
5. All work for which college credit is asked is to be certified on sheet separate from preparatory work, and to give full information, including time, name of instructor, textbook, time devoted to laboratory work, and credit desired.
6. Credit on certificates to be checked by the university committee on entrance, and in case of disagreement it is to be adjusted by the president of the university and the principal of the normal school concerned, and, if this is not possible, by the board of regents.
7. Students are not to go to heads of departments or to instructors in regard to credit, but must negotiate directly with above-named committee.
8. Extension work to be treated and estimated in accordance with those specifications as to instructors, time, method of doing work, laboratory and library facilities, etc.
9. Students thus admitted will so arrange their work at the university as to comply with major and group requirements of the university.

All six State normal schools are offering two years of college-grade work with a definite understanding as to the amount of credit that will be received at the State university. Several private and denominational institutions offer similar normal work. Two of such institutions—Davis and Elkins College, of Elkins, and Lewisburg Seminary, of Lewisburg—offer two years of academic work of the junior college type. The last-named institution is the only one in the State that advertises as a junior college.

WISCONSIN.

The State normal schools of Wisconsin are authorized to give a two-year college course, for which the State university allows two years' credit. Five normal schools are at present offering such a course; namely, Eau Claire, La Crosse, Milwaukee, Oshkosh, and Superior.

No very pronounced attempt has been made in this State to organize junior colleges.

NORTH CENTRAL ASSOCIATION OF SCHOOLS AND COLLEGES.

The following standards for the accrediting of junior colleges were agreed upon at the 1917 meeting of the North Central Association of Colleges and Secondary Schools:

A standard junior college is an institution with a curriculum covering two years of collegiate work (at least 60 semester hours, or the equivalent in year, or term, or quarter credits) which is based upon and continues or supplements the work of secondary instruction as given in an accredited four-year high school. A semester hour is defined as one period of classroom work in lecture or recitation extending through not less than 50 minutes net or their equivalent per week for a period of 18 weeks, two periods of laboratory work being counted as the equivalent of one hour of lecture or recitation.

1. The minimum scholastic requirements of all teachers of classes in the junior college shall be graduation from a college belonging to this association, or an equivalent, and in addition graduate work in a university of recognized standing amounting to one year.

2. The junior college shall require for registration as a junior college student the completion by the student of at least 14 units of high-school work as defined by this association.

3. The work of the junior college must be organized on a collegiate as distinguished from a high-school basis.

4. The teaching schedule of instructors teaching junior college classes shall be limited to 22 hours per week; for instructors devoting their whole time to junior college classes 18 hours shall be a maximum; 15 hours is recommended as the maximum.

5. The limit of the number of students in a recitation or laboratory class in a junior college shall be 30.

6. Students registered in a junior college who are permitted to enroll in regular high-school classes shall not be given full junior-college credit for such work, and in no case shall the credit thus given exceed two-thirds of the usual high-school credit. No junior college will be accredited unless it has a registration of 25 students if it offers but a single year, and 50 students if it offers more than a single year.

7. The junior college shall have library and laboratory facilities sufficient to carry on its work the same as it would be carried on the first two years of an accredited standard college.

8. No junior college will be accredited by this association when maintained in connection with a high school or secondary school unless such school is also accredited by this association.

BOARD OF EDUCATION OF THE METHODIST EPISCOPAL CHURCH SOUTH.

The following definition of a junior college is published in the sixth report of the Commission of Education of the Methodist Episcopal Church South:

The junior college is an institution offering two years' work of college grade, or at least 30 college hours beyond the regular four years of secondary or high-school training, but not equipped for a four-year college course leading to the bachelor's degree.

To be classed as a junior college, an institution, in addition to the entrance requirements named on page 25, must meet the following conditions:

1. A faculty of not less than six competent teachers, having at least a bachelor's degree, exclusive of teachers of art, music, expression, or household arts and sciences.
2. A library of 1,000 bound volumes selected with reference to college uses and exclusive of Government publications.
3. A laboratory equipment worth at least \$1,000, unless the college is exclusively a classical institution.
4. The academy or preparatory department to be a standard secondary school, whose graduate is admitted without examination to the freshman class of the standard college.
5. In the two college years the institution is to do the work usually done in the freshman and sophomore years of the standard college (see p. 26), so that the junior college graduates may enter without prejudice the junior year of the standard college. Each institution should conform as nearly as possible its course of study to the requirements for the freshman and sophomore years of the college with which it is most closely affiliated.
6. The standard college is to grant 30 hours' college credit or full junior standing, and no more, to the graduate of the junior college.
7. The junior college shall not confer any bachelor's degree.

In May, 1917, this board published the following official list of junior colleges:

Alexander Collegiate Institute, Jacksonville, Tex.
 Andrew College, Cuthbert, Ga.
 Blackstone College for Girls, Blackstone, Va.
 Central College for Women, Lexington, Mo.
 Clarendon College, Clarendon, Tex.
 Davenport College, Lenoir, N. C.
 Hiwassee College, Sweetwater, Tenn.
 Howard-Payne College, Fayette, Mo.
 Logan College, Russellville, Ky.
 Louisburg College, Louisburg, N. C.
 Mansfield College, Mansfield, La.
 Martin College, Pulaski, Tenn.
 Marvin College, Fredericktown, Mo.
 Memphis Conference Female Institute, Jackson, Tenn.
 Meridian College, Meridian, Tex.
 Morris Harvey College, Barboursville, W. Va.
 North Texas College, Sherman, Tex.
 San Antonio College, San Antonio, Tex.
 Scarritt-Morrisville College, Morrisville, Mo.
 South Georgia College, McRae, Ga.
 Stamford College, Stamford, Tex.
 Weaver College, Weaverville, N. C.
 Wesley College, Greenville, Tex.
 Young L. G. Harris College, Young Harris, Ga.

ASSOCIATION OF COLLEGES AND SECONDARY SCHOOLS OF THE SOUTHERN STATES.

The condition upon which junior colleges may become members of the Association of Colleges and Secondary Schools of the Southern States are as follows:

1. The college work must be the essential part of the curriculum of any institution recognized as a junior college; therefore junior colleges must publish in their annual catalogues a classified list of all their students.

2. If a preparatory department is maintained, its work must be approved by the association.

3. The minimum requirements for admission to the college classes must correspond with the present requirements of this association.

4. For graduation from the junior college the student must complete satisfactorily 30 year, or 60 semester, hours of work equivalent to that given in the freshman and sophomore years of colleges belonging to this association.

5. No junior college shall confer a degree; a junior college diploma may be awarded.

6. The number of teachers, their training, the amount of work assigned them, the number of college students, the resources and equipment of the junior college are vital factors in fixing the standard of an institution and must be considered by the executive committee in recommending any institution for membership. On these points, therefore, the executive committee shall issue recommendations from time to time for the purpose of informing institutions seeking membership in the association concerning conditions to be met.

A SUMMARY OF THE PRESENT STANDARDS FOR THE ACCREDITING OF JUNIOR COLLEGES.

None of the above regulations, so far as we are aware, make the claim of being complete and final. For the most part they represent the first attempt of the kind that has been made by each of these particular accrediting agencies. They have been based upon standards which have proven more or less successful when applied to other institutions and not upon a thorough knowledge of what the junior college should attempt to accomplish. Many times, also, they have been arranged with reference to more or less local conditions, or, on the other hand, some are so vague and general as to be of little value to the practical administrator. For these reasons it has been thought wise to bring together from all such attempts those points upon which there is more or less of an agreement, with the occasional addition of certain other regulations, which, though mentioned but once or twice, seem to be especially desirable. According to this plan the following composite picture of a standard junior college is arrived at.

A STANDARD JUNIOR COLLEGE.

1. *Establishment.*—According to the school law of the State of California “any high-school district having an assessed valuation of \$3,000,000 or more” may establish a junior college or prescribe junior-college courses of study. Under this law the junior college becomes a part of the public-school system of that State, and the students enrolled in such courses are counted in figuring the amount of State aid which that school should receive, \$15 per student.

Act 148 of the Michigan State Legislature provides that the board of education of any school district of the State having a population of more than 30,000 people is authorized and empowered to offer advanced courses to high-school graduates, such course not to embrace more than two years of collegiate work.

No legal provision has been made for the establishment of a private junior college, but such have been recognized in several of the States.

2. *General standards.*—The following statements may be taken as typical of the general specifications that have been laid down relative to standard junior colleges:

The University of Kansas senate provides that "a junior college must do its work after the manner of a college and must adopt the aims and ideals of a college. This means that the work of the junior college shall be far different from the work of a postgraduate course in a high school or academy."

The regulation of the Kansas State Board of Education states emphatically that "*Instruction in the junior college must be of college rank.*"

The State Department of Education of Texas states that "the character of the curriculum, efficiency of instruction, scientific spirit, and the standard of work shall be factors in determining the standing of the institution."

3. *Material equipment.*—(1) Means of support: The University of California has published the following significant statement, based upon a number of years of experience with junior colleges: "The burden of establishing a junior college should not be undertaken by a community which lacks either abundant financial resources or unity of interest in higher education. Any plan to establish a junior college without involving the community in an expense beyond that of the high school is an attempt to do the impossible."

The regulations of the University of Kansas senate state that "it is to be noted that the maintenance of a junior college will involve an expenditure greatly in excess of the expenses of an ordinary high school. Before organizing a junior college the community should carefully consider its financial ability to maintain such an institution without impairing the character of the work in the elementary and secondary schools."

The regulations of the Texas State Department of Education state that the financial support must be sufficient to meet the expenses of the institution.

(2) Buildings: The University of Kansas senate provides that either a "separate building or suitable rooms in the high-school building shall be reserved for the exclusive or principal use of the college classes; they must provide suitable accommodations in respect to capacity, convenience, efficiency, health, and tasteful appearance."

The Texas standards provide that "the location and construction of the buildings, the lighting, heating and ventilation of the rooms, the nature of the laboratories, corridors, closets, water supply, school furniture, apparatus, and methods of cleaning shall be such as to insure hygienic conditions for both students and teachers."

(3) Libraries: There is complete agreement in emphasizing the fact that the library of the junior college must be chosen with reference to and be adequate for college work. This means that there must be furnished a good supply of books in addition to the regular high-school library. The number of volumes that should be provided varies in the different regulations from one to five thousand, exclusive of public documents. The general consensus of opinion is that there should be at least 2,000 volumes selected with special reference to college work.

Other suggestions seem reasonable: The library should be equipped with a complete card catalogue and be in charge of a trained librarian. There should be an annual appropriation of from \$15 to \$75 for each subject taught, according to its nature, and finally there should be provided a reasonable supply of carefully selected periodicals.

(4) Laboratories: It is agreed also that the laboratories should be adequate and available for strictly college work. This means that they should be sufficiently

large and well equipped to provide the opportunity for the student to perform individually all experiments outlined for all such courses in colleges.

Estimates as to the cost of such an equipment vary with the subjects to be taught. Those for physics range from \$1,000 to \$2,000, for chemistry from \$500 to \$1,500, for biology from \$500 to \$1,500, and for agriculture, botany, and zoology about \$500 each. The University of California suggests that an addition to the high-school equipment of from \$1,500 to \$3,000 for each science taught is necessary.

4. *Administration of the curriculum.*—(1) Scope of the work: It is quite generally agreed that the junior college should not attempt to offer more than the first two years of the standard course above and beyond the standard four-year high-school course. Provision is sometimes made, however, for additional course of a vocational nature.

(2) Departments of instruction: Practically all of the standards agree that there should be at least five departments of instruction. The following are the ones most frequently named: English, history, mathematics, foreign languages, and science.

(3) Requirements for admission: The present consensus of opinion is that the requirements for admission to the junior college should be the same as those for admission to the standard college or university as prescribed by the various accrediting agencies throughout the country. There is practically unanimous agreement that students should not be admitted to junior college until they have completed not less than 14 or 15 secondary units, as such are generally defined at present. The only exception to this rule that has been found is the regulation of the University of Illinois whereby seniors ranking in the upper one-third of their class are permitted to enroll in junior college courses. This regulation has, however, been severely criticized in a report of a special committee appointed by that institution to investigate the junior college situation.

(4) Requirements for graduation: The standards in regard to requirements for graduation are fairly uniform. It is agreed that such should include the completion of the first two years of a standard college course with 60 to 64 semester hours of credit. A period of at least one or two years in each of the five departments mentioned above is usually required. For example, the Kansas State Board of Education requires three-quarters of two years in history and English and one or two years in foreign language and science. The requirements of the University of Missouri are: Six hours of English, five hours of history, ten hours of one foreign language, three hours of mathematics or logic, five hours of physical science, and five hours of biological science. By an hour is meant a 60-minute period of class work, or a 120-minute period of laboratory work, each week for one semester.

(5) Recitation periods: The requirement that the recitation period should be 60 and the laboratory period 120 minutes in length is generally accepted.

5. *Faculty.*—(1) Number: There should be at least five heads of departments devoting all or nearly all of their time to college work. This means that there should be at least one specially prepared person for each of the five departments of instruction above mentioned.

(2) Training: All agree that an instructor in a junior college should have at least a bachelor's degree from a standard college or university. All except one of the accrediting agencies specify at least one year of graduate work in a standard university in the subject to be taught. By many the master's degree is thought to be an essential requirement. In this connection it will be worth while to quote from the suggestions offered by the University of California to supplement the minimum requirements given above: "It is desirable that the junior college teacher should have had some experience in university instruction. And certainly he should not be inferior to the university instructor with reference to advanced scholarship. This means that he should have devoted two or three years to graduate study in a chosen

field, that he should be a specially trained expert, and should have done work equivalent to that usually required for a doctor's degree."

(3) Amount of teaching: All agree that the amount of teaching required of the junior college instructor should be limited. The amount permitted varies from 15 to 25 hours per week, with a majority favoring less than 20. Again we may quote the suggestions of the University of California as an excellent ideal. "He must have leisure for reading, reflection, and growth. The hours of instruction should be limited to not more than 12 or, at most, 15 per week, not because it is the business of the junior college to foster research, but because it is the business of the junior college to get the most out of its instructors, to give them opportunity for life and progress, to encourage them to preserve a scholarly attitude toward their work."

(4) Salary: The suggestions as to the salary of the junior college instructor vary from \$1,200 to \$2,400 a year. California points to the success of those junior colleges that have attempted to standardize their salaries at \$1,800 to \$1,900 a year. Wherever this subject is mentioned, it is emphasized that an adequate salary is absolutely essential to proper instruction.

6. *Students*.—(1) Enrollment: The University of Illinois requires that there should be at least 50 students enrolled in junior college courses.

The Kansas State Board of Education states that "no junior college shall be organized with fewer than 15 students in the first year or 25 students in the first and second years of the college course. When the attendance in the college shall fall below 10 students in the first year or 15 students in the first and second years for a period of nine weeks, such school shall cease to be accredited for college work."

(2) Size of classes: It is thought desirable that classes be limited to 30 for recitation purposes.

(3) Separation of classes: The Kansas State Board of Education provides that there shall be, with very few exceptions, a distinct separation between high-school and college classes. "In no case shall students be grouped together if there is a difference of more than one year in their classification, and if any college student is enrolled in a high-school class the semester hours of college credit allowed shall not be more than one-half the number of recitation hours in any semester."

Although this requirement is seldom mentioned, it may be inferred that it is for the most part complied with in the strict interpretation of the requirement that only high-school graduates shall be permitted to enroll in junior college courses.

(4) Amount of work: The student should not be allowed to do more than 15 or 16 hours of class work per week, two hours of laboratory work counting the same as one hour of recitation.

7. *The academy or preparatory school*.—The requirement of the North Central Association of Schools and Colleges states that "no junior college will be accredited by this association when maintained in connection with a high school or secondary school unless such school is also accredited by this association."

Similarly the State Department of Education of Texas states that "if a preparatory school is maintained in connection with the institution, its work must correspond, in so far as it extends, to that of a standard high school, and must be approved by the State Department of Education."

8. *Inspection*.—Provision is usually made by each accrediting agency for a special committee whose duty it is to frequently inspect the work of the junior colleges under its jurisdiction. The report of this committee serves as a basis for the continued accrediting of each institution.

9. *Limitations*.—(1) No junior college shall confer a baccalaureate degree but may award a junior diploma.

(2) The word "junior" should be prefixed by an institution when applying to itself the term "college."

Chapter VI.

SUMMARY AND CONCLUSION.

The purpose of this investigation was stated in Chapter I, as follows:

1. To make a clear analysis of the forces that have contributed to the origin and development of the junior college.
2. To ascertain the facts in regard to the present status of the various types of junior colleges throughout the United States.
3. To make a summary of the present attempts at the accrediting of junior colleges in the various States.
4. To suggest the possible applications of this information to the problems peculiar to the organization and administration of the junior college.

The conclusions reached may be summarized as follows:

I. Conclusions in regard to the forces that have contributed to the origin and development of the junior college.

1. The idea of a junior college in the form of an extended period of secondary education probably comes from Europe. In its present form, however, the junior college is purely an American product.
2. The University of Michigan was the first institution in this country to recognize officially the junior college idea. This was in 1883. It remained for President Harper, of the University of Chicago, and Dean Lange, of the University of California, to work out almost simultaneously a detailed plan for the organization of junior colleges as a part of our educational system. Since 1892 these institutions have strongly advocated the junior college.
3. Universities have supported the junior college because—
 - (a) The very rapid increase in their enrollment has made it difficult to provide for the needs of the freshman and sophomore classes.
 - (b) The need of early preparation for professional courses has made it necessary to classify entering students on the basis of their future work.
 - (c) There is a growing conviction on the part of leading educators that there is need of a redistribution of work between the secondary school and the university.
4. The recent tendency of normal schools to become colleges or at least to offer college work has given an impetus to the junior college movement:

(a) Normal school officials claim that they must keep pace with the progress of the public school system by providing collegiate training for prospective teachers.

(b) The recent movement toward standardization of all educational institutions has resulted in the belief that a majority of normal schools had best limit the amount of collegiate instruction offered to two years.

5. Public high schools in a number of cities have been led to extend their course to include the first two years of the college course for the following reasons:

(a) There is a widespread demand upon the part of an intelligent public to have the opportunities for securing a higher education brought within reach of all.

(b) There is need of certain vocational and completing courses for the large numbers of students who can not or should not go to the university.

(c) Specific local needs in certain cities have resulted in the establishment of junior colleges.

(d) The tendency to raise the entrance requirements of professional schools to include the first two years of college work.

(e) The geographical remoteness of some cities from standard colleges and universities.

(f) The fact that a local college is a financial saving to a community.

6. An increasing number of small denominational colleges have become junior colleges. Various factors have contributed to this change:

(a) With the progress of the standardization movement it has become more and more difficult for the college of limited means to offer more than two years of college work.

(b) Churches have awakened to the folly and danger of establishing in each State a large number of colleges, all endeavoring to cover the same kind and amount of work. The junior college plan will eliminate competition in a large measure and make possible a closely knit together system of church schools.

(c) Officials of small colleges are desirous of having their respective schools become honest institutions by claiming to do only that which they can do well.

(d) The junior college assures a place in our educational system for the large number of colleges for women in the South.

(e) In some sections of the country the junior college has been encouraged as a means of providing additional opportunities for teacher training.

II. Conclusions in regard to the present status of the various types of junior colleges.

1. The junior college movement has made rapid growth during the past 10 years. Sixty-nine junior colleges have been organized since 1907, and more than half of this number since 1915.

2. There may be distinguished four types of junior colleges:

(a) The "junior college" or "lower division" of the college of liberal arts of the university. This organization is found at present in the Universities of Chicago, California, and Washington.

(b) Normal schools accredited for two years of college work. Such institutions have been officially recognized in the following States: Arizona, Indiana, Michigan, Minnesota, North Dakota, Nebraska, Oklahoma, Utah, West Virginia, and Wisconsin.

(c) The public high school extended to include the first two years of college work. The names of 39 such institutions have been reported. Of this number, 21 are in California.

(d) The small private college which has limited its work to two years. The names of 93 such colleges have been reported. Of this number, 16 are in Texas, 14 in Missouri, 9 in Virginia, and 6 in Illinois.

3. The following facts have been collected in regard to the sources of support of the last two types of junior colleges:

(a) The sources of support of the public junior colleges named in order of importance are: Taxation, State aid, and tuition. There is an increasing tendency to regard these institutions as an integral part of the system of public education and hence as objects of public support.

(b) The sources of support of private junior colleges named in order of importance are: Tuition, church budget, endowment, and offerings and donations. Fully 75 per cent of the income of these institutions comes from sources which can not be counted as fixed and assured. Less than 20 per cent comes from a permanent endowment.

4. The following facts concerning the courses of study offered in the public and private junior colleges are of interest:

(a) The traditional freshman and sophomore courses occupy the bulk of the curriculum of both types of institutions.

(b) Private junior colleges adhere more closely to the classical courses than do the public institutions.

(c) Public junior colleges are offering more and a greater variety of vocational or finishing courses than the private institutions. Of the work offered by the former, 17 per cent may be considered vocational, as compared with only 9 per cent of that offered by the latter. If the courses in education are omitted, the latter would be reduced to 4.5 per cent.

(d) Sixty per cent of the private junior colleges reporting offer courses in education, as compared with only 16 per cent of the public colleges.

5. A careful study of the training, experience, and work of the instructors of the public and private junior colleges yields the following significant facts:

(a) Measured by the academic degrees which they have secured and by the amount of graduate work which they have completed, the training of the instructors of the junior college studied is greatly inferior to the standard maintained by certain colleges and universities. It is also inferior to the standards at present agreed upon as desirable for the junior colleges themselves.

(b) The instructors in junior colleges have had less teaching experience than the instructors of freshman and sophomore classes in certain standard colleges and universities.

(c) Instructors in junior colleges are required to carry a heavier schedule than are the instructors in certain standard colleges and universities. The number of hours devoted exclusively to freshman and sophomore classes is, however, approximately the same in all classes of institutions considered in this investigation.

(d) The enrollment in the recitation sections in the junior colleges is much less on an average than is that of the first and second year classes in the standard colleges and universities considered.

6. The following facts in regard to the enrollment of public and private junior colleges are significant:

(a) Each of the 74 junior colleges considered in this investigation is operated in connection with an academy or a high school.

(b) The high-school departments of the public junior colleges have an average enrollment of 580 students.

(c) The academies operated in connection with the private junior colleges have an average enrollment of only 80 students.

(d) The enrollment in the private junior colleges increased from 1,771 in 1915 to 2,372 in 1917, or 34 per cent.

(e) The enrollment in public junior colleges increased from 592 to 1,587, or 168 per cent, during the same period.

7. The following facts in regard to the graduates of junior colleges are especially significant:

(a) A majority of the junior colleges grant no degree. A small per cent grant the degree or title of "Associate in Arts."

(b) The number of graduates from public junior colleges increased 211 per cent from 1915 to 1917.

(c) During the same period the number of graduates of private junior colleges increased 21 per cent.

(d) Of the 370 graduates of the public junior colleges for this period of three years, 73 per cent continued their work in a higher institution.

(e) Of the 2,225 graduating from the private junior colleges during this period, 41 per cent continued their work in higher institutions.

III. Conclusions in regard to the various attempts to standardize the junior college.

1. The junior college has been recognized officially, at least in specific cases, by the following institutions: The State Universities of Arkansas, California, Idaho, Indiana, Illinois, Iowa, Kansas, Michigan, Minnesota, Missouri, Texas, and Washington, together with Leland Stanford University.

2. The State legislatures of the following States have enacted legislation bearing to a greater or less extent on the junior college movement: California, Idaho, Michigan, Texas, and Wisconsin.

3. The State departments of education, also, of the following States have recognized the junior college: California, Illinois, Kansas, Texas, Utah, Virginia, and West Virginia.

4. In addition to the above the following accrediting agencies have attempted to establish desirable standards for junior colleges: The Kentucky Association of Colleges and Universities, the college section of the State Teachers' Association of Texas, the North Central Association of Schools and Colleges, the board of education of the Methodist Episcopal Church South, and the Association of Colleges and Secondary Schools of the Southern States.

5. The standards that have been established by these various accrediting agencies approximate uniformity on the following points:

(a) The material equipment necessary for college grade work.

(b) The scope of the work that should be attempted and the requirements for admission and graduation.

(c) The training to be expected of each instructor and the amount of teaching to be required.

(d) The amount of work that a student should be permitted to carry.

(e) The relation of the junior college to the high school or academy with which it is connected.

(f) The general standard that instruction in the junior college must be of college rank.

IV. Conclusion in regard to the possible applications of these facts to the problems of the junior college.

1. From the study of the origin and development of the junior college we may conclude that it has appeared in response to certain fundamental needs, and hence that for the present at least it seems assured of a place in our system of education.

2. From the study of the present status of the junior college we may conclude:

(a) That if the junior colleges are to justify their attempt to offer the first two years of standard college work they must secure better-trained faculties. Fully 50 per cent of the junior colleges studied need to raise their standards in this respect.

(b) That at present the junior colleges, especially the private institutions, do not meet the needs of the comparatively large proportion of their students who do not intend to enter the university upon graduation. These institutions should offer more and a greater variety of vocational or finishing courses of college grade.

(c) That public junior colleges should encourage the movement which seeks to make them a definite part of the State system of public education.

(d) That private junior colleges should seek to cooperate with each other and with the State universities in their respective States to the end that a better organized and more economical system of higher education may be established.

(e) That private junior colleges should endeavor to secure permanent endowment of at least \$100,000 for each institution, and they should at all times limit the amount of work which they attempt to offer to that which can be conducted with a maximum efficiency.

3. From the study of the various attempts to standardize the junior college we may conclude that the following minimum standards should be met by any institution attempting to offer the first two years of college work:

(a) Requirement for admission—Graduation from an accredited high school or at least 15 units of credit in standard secondary school work.

(b) Requirement for graduation—At least 60 semester hours of college credit in advance of the 15 units of secondary work.

(c) Equipment—(1) Library—At least 2,000 volumes carefully selected with special reference to college work. (2) Laboratories—An equipment valued at least at \$1,000 to \$1,500 for each science taught.

(d) Teachers—(1) Number—At least five heads of departments. (2) Training—At least one year of graduate work in advance of the bachelor's degree, with special training in the subject to be taught. (3) Amount of teaching—No more than 20 periods per week (60-minute periods). (4) Character of instruction—Must in all cases be strictly of college grade.

(e) The high school or academy operated in connection with the junior college must be fully accredited.

(f) Limitations—(1) The institution must prefix the term "junior" when applying to itself the name "college." (2) No junior college should confer a baccalaureate degree.

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Appendix A.—QUESTIONNAIRE TO JUNIOR COLLEGES, WITH LIST OF INSTITUTIONS.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington.

DEAR SIR: The increase in the number of junior colleges during the past five years and the very great significance of this type of institution to the future of American higher education make it important that a record of the present state of the junior-college movement be had. The Bureau of Education has requested Mr. F. M. McDowell, of the State University of Iowa, to study and report on the junior college. To facilitate this study I take the liberty of sending you the inclosed list of questions, with the request that you answer them as carefully as possible and return your reply to this office at your earliest convenience. Please send also a copy of your latest catalogue or course of study.

Yours, sincerely,

P. P. CLAXTON,
Commissioner.

JUNIOR COLLEGES.

- Name of Institution; location
1. Kind of institution: Public.....; private.....; for men.....; for women.....; coeducational.....
2. Sources of support: Approximate amount received from each.
- State aid..... \$
- Taxation.....
- Tuition.....
- Endowment.....
- Church budget.....
- Offerings and donations.....
- Miscellaneous.....
3. When did your institution become a junior college? Year....., Mo.....; or when was a junior-college department established at your institution? Year....., Mo.....
4. When was your institution accredited as qualified to give work of a standard college grade? Year....., Mo.....
5. By what organization was it so accredited?
6. What credit (in semester hours) do your graduates receive at the State university of your State? semester hours.
7. How many semester hours of credit are required for graduation from your junior college?
8. Does your institution grant a degree? If so, what?
9. Number graduated from your junior college in 1915; 1916; 1917
10. Number who have continued their college work in a higher institution of students graduated in 1915; 1916; 1917

	1914-15	1915-16	1916-17
In high school or academy.....			
College freshmen.....			
College sophomores.....			

12. How many classes or recitation sections are offered in your junior college?

Less than 5 students
 From 5 to 9 students
 From 10 to 14 students
 From 15 to 19 students
 From 20 to 24 students
 From 25 to 29 students
 More than 30 students
 More than 50 students

To meet specific local needs.

14. Will you kindly furnish the following information concerning each instructor in your junior college?

[illegible]

¹ Summer session of six weeks counts one-half semester.

JUNIOR COLLEGES IN UNITED STATES TO WHICH QUESTIONNAIRES WERE SENT.

California:

Fresno Junior College, Fresno.
 Imperial Junior College, Imperial.
 Bakersfield Junior College, Bakersfield.
 Azusa Junior College, Azusa.
 Long Beach Junior College, Long Beach.
 Hollywood Junior College, Los Angeles.
 Los Angeles City Junior College, Los Angeles.
 San Fernando Junior College, San Fernando.
 Pasadena Junior College, Pasadena.
 Fullerton Junior College, Fullerton.
 Orange Junior College, Orange.
 Santa Ana Junior College, Santa Ana.
 Auburn Junior College, Auburn.
 San Diego Junior College, San Diego.
 Santa Barbara Junior College, Santa Barbara.
 Yreka Junior College, Yreka.
 Pomona Junior College, Pomona.
 Riverside Junior College, Riverside.
 Sacramento Junior College, Sacramento.
 Palo Alto Junior College, Palo Alto.

Georgia:

Andrew College, Cuthbert.
 South Georgia College, McRae.
 Young L. G. Harris College, Young Harris.

Illinois:

Blackburn College, Carlinville.
 Bradley Polytechnic Institute, Peoria.
 Ferry Hall, Lake Forest.
 Joliet Junior College, Joliet.
 Frances Shimer School, Mount Carroll.
 Lane Junior College, Chicago.
 Lewis Institute, Chicago.
 Loyola University, Chicago.
 Monticello Seminary, Godfrey.
 Senn Junior College, Chicago.

Indiana:

Goshen Junior College, Goshen.

Iowa:

Graceland College, Lamoni.

Kentucky:

Hamilton College, Lexington.
 Logan College, Russellville.
 Kentucky College for Women, Danville.
 Margaret College, Versailles.
 Millersburg College, Millersburg.

Louisiana:

Mansfield College, Mansfield.

Michigan:

Grand Rapids Junior College, Grand Rapids.
 Detroit Junior College, Detroit.
 Martineau Normal School, Detroit.

Minnesota:

Cloquet High School, Cloquet.
 Rochester High School, Rochester.

Minnesota—Continued.

Stanley College, Minneapolis.
 Hibbing High School, Hibbing.
 Jackson High School, Jackson.
 Villa St. Scholastica, Duluth.

Mississippi:

All Saints College, Vicksburg.
 Mississippi Synodical College, Holly Springs.
 Hillman College, Clinton.

Missouri:

Central College for Women, Lexington.
 Christian College, Columbia.
 Cottey College, Nevada.
 Hardin College, Mexico.
 Howard Payne College, Fayette.
 Kansas City Polytechnic Institute, Kansas City.
 Landenwood College, St. Charles.
 Palmer College, Albany.
 Pritchett College, Albany.
 St. Joseph Junior College, St. Joseph.
 Stephens College, Columbia.
 Synodical College, Fulton.
 The Principia, St. Louis.
 William Woods College, Fulton.

Nebraska:

York College, York.

North Carolina:

Davenport College, Lenoir.
 Louisburg College, Louisburg.
 Weaver College, Weaverville.

Tennessee:

Hiwassee College, Sweetwater.
 Martin College, Pulaski.
 Memphis Female College, Jackson.

Texas:

Alexander Collegiate Institute, Jacksonville.
 Clarendon College, Clarendon.
 Meridian College, Meridian.
 North Texas College, Sherman.
 San Antonio College, San Antonio.
 Stamford College, Stamford.
 Wesley College, Greenville.
 Abilene Christian College, Abilene.
 Thorp Spring College, Thorp Spring.
 Fairmount College, Fairmount.

Virginia:

Marion College, Marion.
 Mary Baldwin Seminary, Staunton.
 Southern College, Petersburg.
 Stonewall Jackson Institute, Abingdon.
 Virginia College, Roanoke.
 Virginia Intermont College, Bristol.

Washington:

Everett High School, Everett.

ADDITIONAL LIST OF INSTITUTIONS TO WHICH JUNIOR COLLEGE QUESTIONNAIRES WERE SENT.

- Alabama:**
Marion Institute, Marion.
- Arkansas:**
Crescent College, Eureka Springs.
- California:**
Miss Head's School, Berkeley.
Girls' Collegiate School, Los Angeles.
Polytechnic Junior College, Los Angeles.
Free Methodist Seminary, Los Angeles.
St. Patrick's Seminary, Menlo Park.
St. Anthony's College, Santa Barbara.
Santa Monica Junior College, Santa Monica.
Selma Junior College, Selma.
Westlake School for Girls, Westlake.
- Colorado:**
St. Stephen's School, Colorado Springs.
- Connecticut:**
St. Thomas Preparatory Seminary, Hartford.
Pomfret School, Pomfret Center.
Connecticut Literary Institute, Fairfield.
Gilbert School, Winsted.
- District of Columbia (Washington):**
Colonial School for Girls.
Columbia University School.
Fairmont Seminary.
Immaculate Seminary.
Miss Madeira's School.
- Florida:**
Ruskin College, Ruskin.
- Georgia:**
Lucy Cobb Institute, Athens.
- Idaho:**
Idaho Technical Institute, Pocatello.
- Illinois:**
Convent of the Sacred Heart, Lake Forest.
St. Mary's School, Knoxville.
St. Bede College, Peru.
- Indiana:**
Manchester College, North Manchester.
Winona College, Winona.
St. Joseph's College, Collegeville.
Concordia College, Fort Wayne.
- Iowa:**
Highland Park College, Des Moines.
Humboldt College, Humboldt.
- Kansas:**
Oswego College, Oswego.
St. John's Lutheran College, Winfield.
- Kentucky:**
Cumberland College, Williamsburg.
- Louisiana:**
Straight University (Negro), New Orleans.
St. Joseph's Seminary, St. Benedict.
Centenary College, Shreveport.
- Maryland:**
Boys' Latin School, Baltimore.
St. Charles College, Catonsville.
St. Joseph's Academy, Emmitsburg.
St. James School, St. James School.
- Massachusetts:**
Academy of Notre Dame, Boston.
Roxbury Latin School, Boston.
Groton School, Groton.
Mount Ida School for Girls, Newton.
House in the Pines, Norton.
St. Mark's School, Southboro.
- Michigan:**
Emmanuel Missionary College, Berrien Springs.
- Minnesota:**
Faribault High School, Faribault.
St. Mary's Hall, Faribault.
Park Region Luther College, Fergus Falls.
Concordia College, St. Paul.
- Mississippi:**
Mississippi Synodical College, Holly Springs.
Belhaven Collegiate and Industrial Institute, Jackson.
- Missouri:**
St. Paul's College, Concordia.
Grand River College, Gallatin.
Forest Park College, St. Louis.
Scarritt-Morrisville College, Morrisville.
Academy of the Sacred Heart, St. Charles.
The Principia, St. Louis.
George R. Smith College (Negro), Sedalia.
- Nebraska:**
Evangelical Lutheran Teachers' Seminary
Seward.
- New Jersey:**
Centenary Collegiate Institute, Hackettstown.
Hoover School, Paterson.
- New York:**
St. Agnes School, Albany.
Packer Collegiate Institute, Brooklyn.
Holy Angels Collegiate Institute, Buffalo.
Bennett School for Girls, Millbrook.
Comstock School, New York.
Glen Eden Seminary, Poughkeepsie.
Wagner Memorial Lutheran College, Rochester.
- North Carolina:**
Littleton College, Littleton.
Chowan College, Murfreesboro.
- Ohio:**
Urbana University School, Urbana.
- Oklahoma:**
Oklahoma Holiness College, Bethany.
- Oregon:**
Columbia Junior College, Milton.
- Pennsylvania:**
Academy of the New Church, Bryn Athyn.
Beechwood School, Jenkintown.
St. Francis College, Loretto.
St. Mary's College, North East.
Academy of the Sacred Heart, Philadelphia.
Chestnut Hill Academy, Philadelphia.
Friends' Select School, Philadelphia.
Schuylkill Seminary, Reading.
St. Thomas College, Scranton.
- Rhode Island:**
St. George's School, Newport.
- South Carolina:**
Anderson College, Anderson.
Claflin University (Negro), Orangeburg.
- Tennessee:**
Columbia Institute, Columbia.
Milligan College, Milligan.
Nashville College for Young Ladies, Nashville.
Ward-Belmont School, Nashville.
Ruskin Cave College, Ruskin.
Murphy College, Sevierville.
Laneville College, Trenton.

Texas:

College of Marshall, Marshall.
 Decatur Baptist College, Decatur.
 John Tarleton College, Stephenville.
 Midland College, Midland.
 St. Mary's College, Dallas.
 Texas Military College, Terrell.
 Tillotson College (Negro), Austin.
 Wesley College, Greenville.
 Westminster College, Tehuacana.
 Wiley University (Negro), Marshall.
 Texas Presbyterian College, Milford.
 San Antonio Female College, San Antonio.
 Carr-Burdette College, Sherman.

Vermont:

Dorby Academy, Derby.

Virginia:

Averett College, Danville.
 Daleville College, Daleville.

Virginia—Continued.

Episcopal High School, Alexandria.
 McGuire's University School, Richmond.
 Stuart Hall, Staunton.
 Fort Loudoun Seminary, Winchester.
 Sullins College, Bristol.
 Virginia Union University (colored), Richmond.

Washington:

Columbia Lutheran College, Everett.
 Spokane College, Spokane.
 Walla Walla College, College Place.

West Virginia:

Salem College, Salem.

Wisconsin:

Concordia College, Milwaukee.
 St. Lawrence College, Mount Calvary.
 St. Mary's College and Academy, Prairie du Chien.

Appendix B.—QUESTIONNAIRE TO STATE UNIVERSITIES.

SUBSTATION OF U. S. BUREAU OF EDUCATION,
 UNIVERSITY OF IOWA,
 Iowa City, Iowa.

With the approval of the Commissioner of Education, the substation of the Bureau of Education at the University of Iowa is undertaking a study of the present status of the junior college movement in the United States.

By junior college is meant any institution, public or private, which is offering one or two years of standard college work above a four-year high-school course. Will you kindly aid us by filling the following blank and returning it to us at your earliest convenience? Please use inclosed penalty envelope for reply.

Sincerely yours,

WM. F. RUSSELL,
Special Collaborator, Director of Substation.

1. Has your institution given official recognition to any so-called junior colleges in your State?.....
 (If so, will you kindly send us a copy of the terms and standards of accrediting junior colleges, with a list of such accredited junior colleges.)
2. Does your institution grant advanced credit to students who have taken postgraduate work in high schools?.....
3. If so, under what conditions?.....

Additional information regarding the junior college movement in your State will be appreciated.

.....
 (Signature and title)

.....
 (Address)

Appendix C.—QUESTIONNAIRE TO STATE DEPARTMENTS OF EDUCATION.

SUBSTATION OF U. S. BUREAU OF EDUCATION,
UNIVERSITY OF IOWA,
Iowa City, Iowa.

DEAR SIR: With the approval of the Commissioner of Education, the substation of the Bureau of Education at the University of Iowa is undertaking a study of the present status of the junior college movement in the United States.

Will you please tell me what official action has been taken in your State with reference to "junior colleges," that is, institutions, public or private, which offer one or two years of standard college work above the four-year high-school course?

If you have "accredited" any such institutions, kindly send me a copy of the terms and standards of accrediting, and a list of institutions so accredited.

If any legislation has been enacted on this subject please send me two copies of each law.

I shall be glad to receive any additional information you can give me relating to the matter, and will appreciate your assistance. A return penalty envelope and mailing slips are inclosed for your reply.

Sincerely, yours,

WM. F. RUSSELL,
Special Collaborator, Director of Substation.

Appendix D.—QUESTIONNAIRE TO STATE UNIVERSITY OF IOWA.

STATE UNIVERSITY OF IOWA,
COLLEGE OF EDUCATION.

To the Members of the University Faculty:

Under the direction of the College of Education and with the approval and cooperation of the dean of the college of liberal arts, I am undertaking a study of the junior colleges in the United States.

It is desirable as a basis of comparison that data be secured regarding the preparation and training of those who instruct first and second year students in some of our standard colleges and universities. To this end will you kindly aid us by filling out the following blank and returning it to me at your earliest convenience?

Most respectfully yours,

F. M. McDOWELL.

- Name of instructor.....
1. College or department.....
2. Title: Professor.
Associate Professor.
Assistant Professor.
Instructor.
Assistant Instructor.
(Check the title that applies in your case.)
3. Degrees..... When and where received.....
4. Number of semesters of graduate work.....
(Six weeks summer session equal to one-half semester.)
5. Number of years taught up to the present year.....
Schedule first semester this academic year.....
1. Number of recitation periods per week.....
2. Length of periods.....
3. Number of these periods in classes in which freshmen and sophomore students are enrolled.....
4. Total enrollment in each recitation section taught.....
5. How many of the recitation sections taught are composed entirely of freshmen and sophomore students?.....

Appendix E.—QUESTIONNAIRE TO ILLINOIS AND MINNESOTA UNIVERSITIES, AND COE, CORNELL, AND GRINNELL COLLEGES.

SUBSTATION OF U. S. BUREAU OF EDUCATION,
UNIVERSITY OF IOWA,
Iowa City, Iowa.

To the Members of the Faculty:

With the approval of the Commissioner of Education, the substation of the Bureau of Education at the University of Iowa is undertaking a study of the present status of the junior college movement in the United States.

As a basis of comparison it is desirable that data be obtained regarding the preparation and training of those who instruct first and second year students in standard colleges and universities. To this end will you kindly answer the following questions and return this sheet to me at your earliest convenience? You may use the inclosed franked envelope for reply.

Sincerely, yours,

WM. F. RUSSELL,
Special Collaborator, Director of Substation.

1. Degrees received..... When and where received
 2. Number of semesters of graduate work which you have done.....
(Six weeks summer session equal to one-half semester.)
 3. Number of years taught up to present year
 4. Number of recitation periods taught per week during the present year.....
 5. Length of each period
 6. Number of these periods per week devoted to classes in which freshmen and sophomores are enrolled
 7. Total enrollment in each recitation section in which freshmen and sophomores are enrolled
 8. Total number of freshmen and sophomores enrolled in each of these sections.....
- (Signature and title.) (Address.)

Appendix F.—GRADUATE WORK OF MEMBERS OF THE FACULTIES.

Distribution of instructors according to number of semesters of graduate work.

Of 469 instructors of 60 junior colleges.		Of 59 instructors of freshman and sophomore classes of University of Iowa.	
Number of semesters:	Frequency.	Number of semesters:	Frequency.
0- 1.9.....	192	0- 1.9.....	2
2- 3.9.....	158	2- 3.9.....	7
4- 5.9.....	66	4- 5.9.....	11
6- 7.9.....	33	6- 7.9.....	17
8- 9.9.....	13	8- 9.9.....	16
12-13.9.....	5	10-11.9.....	5
	469	14-15.9.....	1
			59
1.2.....	First quartile.	5.0.....	First quartile.
2.5.....	Median.	7.1.....	Median.
4.1.....	Third quartile.	8.8.....	Third quartile.
1.7.....	Mean deviation.	1.8.....	Mean deviation.

*Distribution of instructors according to number of semesters of graduate work—Contd.*Of 82 instructors of freshman and sophomore classes
of University of Illinois.

Number of semesters:	Frequency.
0-1.9.....	1
2-3.9.....	13
4-5.9.....	11
6-7.9.....	33
8-9.9.....	19
10-11.9.....	4
12-13.9.....	2
14-15.9.....	1
	<hr/> 82

5.1.....First quartile.
7.0.....Median.
8.4.....Third quartile.
1.8.....Mean deviation.

Of 57 instructors of freshman and sophomore classes
of University of Minnesota.

Number of semesters:	Frequency
0-1.9.....	1
2-3.9.....	1
4-5.9.....	9
6-7.9.....	29
8-9.9.....	11
10-11.9.....	6
	<hr/> 57

6.1.....First quartile.
7.2.....Median.
8.3.....Third quartile.
1.3.....Mean deviation.

Of 15 instructors of freshman and sophomore classes
of Coe College.

Number of semesters:	Frequency.
0.....	1
1.....	1
2.....	2
3.....	1
4.....	2
5.....	1
6.....	4
7.....	1
8.....	1
	<hr/> 15

2.3.....First quartile.
4.7.....Median.
6.5.....Third quartile.
2.2.....Mean deviation.

Of 16 instructors of freshman and sophomore classes
of Cornell College.

Number of semesters:	Frequency.
0.....	1
1.....	2
2.....	2
3.....	2
5.....	3
7.....	1
8.....	2
10.....	2
11.....	1
	<hr/> 16

2.5.....First quartile.
5.3.....Median.
8.5.....Third quartile.
2.1.....Mean deviation.

Of 26 instructors of freshman and sophomore
classes of Grinnell College.

Number of semesters:	Frequency.
0-2.9.....	4
3-5.9.....	4
6-8.9.....	12
9-11.9.....	4
12-14.9.....	2
	<hr/> 26

4.8.....First quartile.
7.2.....Median.
8.6.....Third quartile.
2.3.....Mean deviation.

Appendix G.—YEARS OF TEACHING EXPERIENCE.*Distribution of instructors according to number of years of teaching experience.*

Of 516 instructors of 69 junior colleges.		Of 68 instructors of the University of Iowa.	
Number of years:	Frequency.	Number of years:	Frequency.
0-4.....	164	0-4.....	17
5-9.....	188	5-9.....	13
10-14.....	87	10-14.....	16
15-19.....	50	15-19.....	13
20-24.....	47	20-24.....	4
25-29.....	24	25-29.....	2
30-34.....	9	30-34.....	3
35-39.....	5		
40-44.....	2		68
	516		
3.9.....	First quartile.	5.0.....	First quartile.
8.6.....	Median.	11.2.....	Median.
15.6.....	Third quartile.	16.9.....	Third quartile.
4.9.....	Mean deviation.	6.4.....	Mean deviation.

Of 90 instructors of the University of Illinois.		Of 60 instructors of the University of Minnesota.	
Number of years:	Frequency.	Number of years:	Frequency.
0-4.....	24	0-4.....	12
5-9.....	31	5-9.....	12
10-14.....	17	10-14.....	15
15-19.....	7	15-19.....	12
20-24.....	4	20-24.....	3
25-29.....	5	25-29.....	3
30-34.....	2	30-34.....	3
	90		60
4.7.....	First quartile.	6.2.....	First quartile.
8.4.....	Median.	12.0.....	Median.
13.7.....	Third quartile.	17.5.....	Third quartile.
5.6.....	Mean deviation.	6.3.....	Mean deviation.

Of 16 instructors of Coe College.		Of 16 instructors of Cornell College.	
Number of years:	Frequency.	Number of years:	Frequency.
2.....	1	4.....	2
3.....	2	5.....	2
6.....	1	6.....	1
9.....	2	10.....	2
10.....	1	13.....	1
12.....	1	15.....	1
16.....	1	16.....	1
18.....	1	18.....	1
19.....	2	20.....	2
20.....	1	24.....	1
25.....	1	26.....	1
26.....	1	40.....	1
27.....	1		16
	16		
6.0.....	First quartile.	5.5.....	First quartile.
16.0.....	Median.	15.0.....	Median.
20.0.....	Third quartile.	20.5.....	Third quartile.
7.5.....	Mean deviation.	7.5.....	Mean deviation.

Distribution of instructors according to number of years of teaching experience—Contd.

Of 26 instructors of Grinnell College.	
Number of years:	Frequency.
0-4.....	5
5-9.....	6
10-14.....	7
15-19.....	1
20-24.....	6
25-29.....	1
	26
6.2.....	First quartile.
11.4.....	Median.
15.4.....	Third quartile.
6.3.....	Mean deviation.

Appendix H.—AMOUNT OF TEACHING REQUIRED PER WEEK.*Distribution of instructors according to total number of recitation periods (clock hours) teaching per week.*

Of 522 instructors of 66 junior colleges.		Of 518 instructors of 66 junior colleges.	
Number of periods:	Frequency.	Number of periods:	Frequency.
0-4.....	25	0-4.....	26
5-9.....	36	5-9.....	220
10-14.....	140	10-14.....	120
15-19.....	212	15-19.....	39
20-24.....	83	20-24.....	11
25-29.....	20	25-29.....	2
30-34.....	6		518
	522	5.0.....	First quartile.
12.4.....	First quartile.	8.0.....	Median.
16.4.....	Median.	12.7.....	Third quartile.
19.5.....	Third quartile.	3.6.....	Mean deviation.
4.3.....	Mean deviation.		

Of 65 instructors of freshman and sophomore classes of the University of Iowa.		Of 60 instructors of freshman and sophomore classes of University of Iowa according to recitation periods devoted to teaching first and second year classes.	
Number of periods:	Frequency.	Number of periods:	Frequency.
0-4.....	7	0-4.....	21
5-9.....	14	5-9.....	16
10-14.....	29	10-14.....	17
15-19.....	14	15-19.....	6
20-24.....	1	20-24.....	0
	65		60
8.3.....	First quartile.	3.6.....	First quartile.
12.0.....	Median.	7.8.....	Median.
14.7.....	Third quartile.	12.4.....	Third quartile.
3.5.....	Mean deviation.	4.2.....	Mean deviation.

Distribution of instructors according to total number of recitation periods (clock hours) teaching per week—Continued.

Of 88 instructors of University of Illinois.		Of 86 instructors of University of Illinois according to recitation periods devoted to freshman and sophomore classes.	
Number of hours:	Frequency.	Number of hours:	Frequency.
0-4.....	4	0-4.....	15
5-9.....	39	5-9.....	46
10-14.....	40	10-14.....	23
15-19.....	4	15-19.....	12
20-24.....	1	20-24.....	0
	88		86
7.3.....	First quartile.	5.7.....	First quartile.
10.1.....	Median.	8.0.....	Median.
12.9.....	Third quartile.	10.7.....	Third quartile.
3.1.....	Mean deviation.	2.8.....	Mean deviation.

Of 60 instructors of University of Minnesota.		Of 58 instructors of University of Minnesota according to recitation periods devoted to freshman and sophomore classes.	
Number of hours:	Frequency.	Number of hours:	Frequency.
0-4.....	2	0-4.....	11
5-9.....	18	5-9.....	36
10-14.....	33	10-14.....	9
15-19.....	6	15-19.....	2
20-24.....	1	20-24.....	0
	60		58
8.6.....	First quartile.	5.4.....	First quartile.
11.5.....	Median.	7.5.....	Median.
13.8.....	Third quartile.	9.5.....	Third quartile.
2.8.....	Mean deviation.	2.0.....	Mean deviation.

Of 16 instructors of Coe College.		Of 16 instructors of Coe College according to recitation periods devoted to freshman and sophomore classes.	
Number of hours:	Frequency.	Number of hours:	Frequency.
3.....	1	3.....	3
11.....	1	5.....	1
12.....	1	6.....	2
13.....	3	7.....	2
14.....	3	9.....	1
15.....	2	10.....	1
17.....	3	11.....	1
18.....	1	12.....	2
20.....	1	13.....	1
	16	15.....	1
		16.....	1
			16
13.3.....	First quartile.	6.0.....	First quartile.
14.6.....	Median.	9.0.....	Median.
17.3.....	Third quartile.	12.5.....	Third quartile.
3.3.....	Mean deviation.	4.0.....	Mean deviation.

Distribution of instructors according to total number of recitation periods (clock hours) teaching per week—Continued.

Of 16 instructors of Cornell College.		Of 16 instructors of Cornell College according to recitation periods devoted to freshman and sophomore classes.	
Number of hours:	Frequency.	Number of hours:	Frequency.
9.....	1	2.....	1
11.....	2	6.....	6
12.....	2	8.....	3
13.....	2	9.....	1
14.....	1	12.....	2
15.....	2	16.....	3
16.....	2		16
17.....	1		
18.....	1	6.5.....	First quartile.
21.....	1	8.3.....	Median.
24.....	1	12.5.....	Third quartile.
	16	2.3.....	Mean deviation.
12.5.....	First quartile.		
15.0.....	Median.		
17.0.....	Third quartile.		
2.7.....	Mean deviation.		

Of 26 instructors of Grinnell College.		Of 26 instructors of Grinnell College according to recitation periods devoted to freshman and sophomore classes.	
Number of hours:	Frequency.	Number of hours:	Frequency.
0-2.9.....	0	0-2.9.....	0
3-5.9.....	0	3-5.9.....	4
6-8.9.....	4	6-8.9.....	8
9-11.9.....	8	9-11.9.....	9
12-14.9.....	7	12-14.9.....	2
15-17.9.....	6	15-17.9.....	3
18-20.9.....	1		26
	26		
9.9.....	First quartile.	6.9.....	First quartile.
12.4.....	Median.	9.3.....	Median.
15.2.....	Third quartile.	11.5.....	Third quartile.
2.8.....	Mean deviation.	2.8.....	Mean deviation.

Appendix I.—STUDENTS IN RECITATION SECTIONS.*Distribution of recitation sections according to number of students enrolled.*

Of 1,648 recitation sections of 65 junior colleges.		Of 168 recitation sections of freshman and sophomore classes of University of Iowa.	
Number of students:	Frequency.	Number of students:	Frequency.
0-4.....	291	0-4.....	2
5-9.....	244	5-9.....	9
10-14.....	300	10-14.....	24
15-19.....	251	15-19.....	26
20-24.....	202	20-24.....	27
25-29.....	134	25-29.....	19
30-49.....	116	30-34.....	14
50 plus.....	10	35-39.....	13
	1,648	40-44.....	4
		45-49.....	9
6.6.....	First quartile.	50-54.....	9
13.1.....	Median.	55-59.....	1
21.0.....	Third quartile.	60-150.....	11
7.6.....	Mean deviation.		168
		16.3.....	First quartile.
		23.4.....	Median.
		37.0.....	Third quartile.
		12.6.....	Mean deviation.
Of 144 recitation sections of freshman and sophomore classes of University of Illinois.		Of 119 recitation sections of freshman and sophomore classes of University of Minnesota.	
Number of students:	Frequency.	Number of students:	Frequency.
0-4.....	0	0-4.....	2
5-9.....	5	5-9.....	7
10-14.....	8	10-14.....	9
15-19.....	14	15-19.....	16
20-24.....	44	20-24.....	21
25-29.....	44	25-29.....	23
30-34.....	21	30-34.....	13
35-39.....	4	35-39.....	8
40-44.....	1	40-44.....	3
50-80.....	3	45-49.....	1
	144	50-54.....	5
		55-182.....	12
21.1.....	First quartile.		119
25.1.....	Median.	18.3.....	First quartile.
29.2.....	Third quartile.	26.0.....	Median.
5.5.....	Mean deviation.	34.7.....	Third quartile.
		10.7.....	Mean deviation.

Distribution of recitation sections according to number of students enrolled—Continued.

Of 48 recitation sections of freshman and sophomore classes of Coe College.		Of 33 recitation sections of freshman and sophomore students of Cornell College.	
Number of students:	Frequency.	Number of students:	Frequency.
0-4.....	2	0-4.....	5
5-9.....	7	5-9.....	0
10-14.....	7	10-14.....	3
15-19.....	9	15-19.....	5
20-24.....	4	20-24.....	10
25-29.....	4	25-29.....	5
30-34.....	5	30-34.....	1
35-39.....	6	35-39.....	2
40-44.....	3	40-44.....	0
50 plus.....	1	45-49.....	0
	48	50 plus.....	2
			33
12.1.....	First quartile.	15.2.....	First quartile.
19.4.....	Median.	21.7.....	Median.
33.0.....	Third quartile.	26.7.....	Third quartile.
10.5.....	Mean deviation.	8.6.....	Mean deviation.

Of 57 recitation sections of freshman and sophomore students of Grinnell College.

Number of students:	Frequency.
0-4.....	2
5-9.....	7
10-14.....	5
15-19.....	3
20-24.....	9
25-29.....	10
30-34.....	6
35-39.....	3
40-44.....	3
45-49.....	2
50-54.....	2
55-59.....	2
60 plus.....	3
	57
15.4.....	First quartile.
26.2.....	Median.
36.2.....	Third quartile.
12.3.....	Mean deviation.

[illegible]

As stated by presidents or principals.

[illegible]

¹ As stated by presidents or principals.

[illegible]

Appendix K.—ORGANIZATION OF JUNIOR COLLEGES.

Table showing organization of junior colleges.

Location.	Institution.	Kind.	Control.	When org- anized.	When ac- credited.	By whom accredited.	Hours' credit at univer- sity.	Require- ments for gradua- tion.	Degree granted.
ARKANSAS.									
Eureka Springs.....	Crescent.....	Women.....	Private.....	1910	1913	University of Arkansas.....	60	60	No.
CALIFORNIA.									
Arusa.....	Citrus Union.....	Coeeducation	Public.....	1915	1917	University of California.....	64	60	N.
Bakersfield.....	Kern County Union.....	do.....	do.....	1913	1914	do.....	64	64	N.
East Auburn.....	Placer Junior College.....	do.....	do.....	1914	1914	do.....	64	64	N.
Fresno.....	Fresno Junior College.....	do.....	do.....	1910	1910	do.....	64	64	N.
Fullerton.....	Fullerton Junior College.....	do.....	do.....	1913	1914	do.....	64	64	N.
Hollywood.....	Hollywood Junior College.....	do.....	do.....	1912	1913	do.....	64	64	N.
Imperial.....	Imperial Junior College.....	do.....	do.....	.....	.....	.....	.....	.....	.....
Long Beach.....	Long Beach Junior College.....	do.....	do.....	.....	.....	.....	.....	.....	.....
Los Angeles.....	Girls Col. School.....	Women.....	Private.....	.....	.....	.....	.....	.....	.....
Do.....	Los Angeles Junior College.....	Coeeducation	Public.....	1912	1912	University of California.....	60	60	N.
Do.....	Los Angeles Seminary.....	Women.....	Private.....	1911	1917	do.....	62	62	N.
Do.....	Westlake.....	do.....	do.....	1917	.....	do.....	.....	.....	.....
Pomona.....	Pomona Junior College.....	Coeeducation	Public.....	1916	1916	do.....	60	64	N.
Riverside.....	Riverside Junior College.....	do.....	do.....	1916	1916	do.....	64	64	N.
Sacramento.....	Sacramento Junior College.....	do.....	do.....	1916	.....	do.....	.....	.....	.....
San Diego.....	San Diego Junior College.....	do.....	do.....	.....	.....	do.....	.....	.....	.....
Santa Ana.....	Santa Ana Junior College.....	do.....	do.....	.....	.....	do.....	.....	.....	.....
Santa Barbara.....	Santa Barbara Junior College.....	do.....	do.....	1915	1916	University of California.....	60	60	No.
DISTRICT OF COLUMBIA.									
Washington.....	Miss Madeira's School.....	Women.....	Private.....	1906	.....	.....	.....	.....	No.
GEORGIA.									
Cuthbert.....	Andrew College.....	Women.....	Private.....	1915	1915	Methodist Episcopal Church (South). Church	.....	60	A. A.
MacRae.....	South Georgia College.....	do.....	do.....	.....	.....	.....	.....	.....	.....
Young Harris.....	Young L. O. Harris.....	Coeeducation	do.....	1916	1916	.....	72	72	No.

STATE.	SCHOOL.	EDUCATION.	DATE.	AGE.	RELIGION.	COLLEGE.	DEGREE.
IDAHO.							
	Pocatello.....	Idaho State Academy.....	1914	1918		University of Iowa.....	60 A. A.
IOWA.							
	Lamoni.....	Grace land College.....	1911	1911		University of Chicago.....	60 No.
	Osage.....	Cedar Valley Seminary.....	1896	1896		do.....	60 P. B.
			1835	1914		do.....	60 No.
ILLINOIS.							
	Carlinville.....	Blackburn College.....	1897	1917		University of Chicago.....	61 No.
	Chicago.....	Lane Junior College.....	1897	1911		do.....	60 No.
	Do.....	Lewis Institute.....	1897	1911		do.....	60 No.
	Godfrey.....	Monticello Seminary.....	1897	1911		do.....	60 No.
	Joliet.....	Joliet Junior College.....	1897	1911		do.....	60 No.
	Lake Forest.....	Ferry Hall.....	1897	1911		do.....	60 No.
	Mount Carroll.....	Francis Shimer School.....	1897	1911		do.....	60 No.
	Peoria.....	Bradley Polytechnic Institute.....	1897	1911		do.....	60 A. A.
INDIANA.							
	Collegeville.....	St. Joseph College.....	1914	1914			No.
	Fort Wayne.....	Concordia College.....	do	do			
KENTUCKY.							
	Danville.....	Kentucky College.....	1915	1915		University of Kentucky.....	64 No.
	Lexington.....	Hamilton College for Women.....	1910	1910		Transylvania.....	60 No.
	Millersburg.....	Millersburg College.....	1916	1916		University of Kentucky.....	60 No.
	Russellville.....	Logan Female College.....	1913	1913		do.....	60 B. A.
	Williamsburg.....	Cumberland College.....	1913	1913		do.....	60 B. A.
LOUISIANA.							
	Mansfield.....	Mansfield Female College.....	1913	1913		Methodist Episcopal Church (South).....	40 M. EL.
	New Orleans.....	Straight University.....	1916	1916		do.....	60 B. A.
	St. Benedict.....	St. Joseph Seminary.....	1903	1903		do.....	60
MASSACHUSETTS.							
	Newton.....	Mount Ida School.....	1901	1901			2 years. No.
MICHIGAN.							
	Detroit.....	Detroit Junior College.....	1915	1915		University of Michigan.....	60 No.
	Do.....	Martindale Normal School.....	do	do		do.....	60 No.
	Grand Rapids.....	Grand Rapids Junior College.....	do	do		do.....	60 No.

Table showing organization of junior colleges—Continued.

Location.	Institution.	Kind.	Control.	When orga- nized.	When accred- ited.	By whom accredited.	Hours' credit at univer- sity.	Require- ments for gradua- tion.	Degree granted.
MINNESOTA.									
Cloquet.....	Cloquet Junior College.....	Coeducation	Public.....	1914	1914	University of Minnesota.....	64	60	No.
Farbault.....	Farbault High School.....	do.....	do.....	1915	1915	do.....	60	60	No.
Hibbing.....	Hibbing Junior College.....	do.....	do.....	1916	1916	do.....	60	60	No.
Jackson.....	Jackson Junior College.....	do.....	do.....	1916	1916	do.....	60	60	No.
Minneapolis.....	Stanley College.....	do.....	Private.....	1915	1915	University of Minnesota.....	60	60	No.
Rochester.....	Rochester Junior College.....	do.....	Public.....	1915	1915	do.....	60	60	No.
MISSISSIPPI.									
Holly Springs.....	Mississippi Synodical College.....	Women.....	Private.....	1916	1916	University of Mississippi.....	60	64	No.
Vicksburg.....	All Saints College.....	do.....	do.....	1909	1909	do.....	60	60	No.
MISSOURI.									
Columbia.....	Christian College.....	Women.....	Private.....	1907	1913	University of Missouri.....	60	60	A. A.
Do.....	Stephens College.....	do.....	do.....	1913	1913	do.....	60	60	A. A.
Concordia.....	St. Paul's College.....	Men.....	do.....	1907	1907	do.....	60	60	No.
Fayette.....	Howard-Payne College.....	Women.....	do.....	1916	1916	University of Missouri.....	62	60	A. A.
Fulton.....	Synodical College.....	do.....	do.....	1916	1916	do.....	60	60	A. A.
Do.....	William Woods College.....	do.....	do.....	1915	1915	University of Missouri.....	60	60	A. A.
Glasgow.....	Pritchett College.....	do.....	do.....	1915	1915	University of Missouri.....	60	60	A. A.
Kansas City.....	Kansas City Polytechnic.....	Coeducation	Public.....	1915	1915	University of Missouri.....	60	60	A. A.
Mexico.....	Hardin College.....	Women.....	Private.....	1913	1913	University of Missouri.....	60	60	A. A.
Nevada.....	Cottey College.....	do.....	do.....	1911	1913	do.....	60	60	A. A.
St. Charles.....	Lindenwood College.....	do.....	do.....	1911	1913	do.....	60	60	A. A.
St. Joseph.....	St. Joseph Junior College.....	Coeducation	Public.....	1915	1915	do.....	120	60	No.
St. Louis.....	Forest Park College.....	Women.....	Private.....	1915	1915	do.....	60	60	No.
NORTH CAROLINA.									
Lenoir.....	Davenport College.....	Women.....	Private.....	1914	1911	Methodist Episcopal Church (South). do.....	62	60	No.
Louisburg.....	Louisburg Female College.....	do.....	do.....	1916	1916	do.....	64	63	A. A.
Weaver.....	Weaver College.....	Coeducation	do.....	1916	1916	do.....	64	64	A. A.
OHIO.									
Urbana.....	Urbana University School.....	Coeducation	Private.....	1916	1916	do.....	60	60	No.

OKLAHOMA.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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THE JUNIOR COLLEGE.

Appendix L.—GRADUATES OF JUNIOR COLLEGES.

Number of graduates of junior colleges for the years 1915-1917; also number continuing work in higher institutions.

[illegible]

IOWA.		0	3	7	5	2	2	16	9
Lamoni.....	Graceland College.....								
Osage.....	Cedar Valley Seminary.....								
ILLINOIS.									
Carlinville.....	Blackburn College.....								
Chicago.....	Lane Junior College.....	9	16	18	8	14	15	43	37
Do.....	Lewis Institute.....	89	90	60	40	40	30	239	110
Godfrey.....	Monticello Seminary.....	18	27	28	9	14	12	73	35
Joliet.....	Joliet Junior College.....								
Lake Forest.....	Ferry Hall.....	11	4	11	6	3	9	26	18
Mount Carroll.....	Franks Shimer School.....	12	11	0	6	8		23	14
Peoria.....	Bradley Polytechnic Institute.....	108	147	125	20	37	30	380	87
INDIANA.									
Collegeville.....	St. Joseph College.....	18	12	14	18	12	13	44	43
Fort Wayne.....	Concordia College.....	27	31	22	27	31	22	80	80
KENTUCKY.									
Danville.....	Kentucky College.....								
Lexington.....	Hamilton College for Women.....	5	11	16	3	6	3	32	12
Millersburg.....	Millersburg College.....	3	11	6	2	7	2	20	11
Russellville.....	Logan Female College.....								
Williamsburg.....	Cumberland College.....	6	8	1	2	5		15	7
LOUISIANA.									
Mansfield.....	Mansfield Female College.....	7	21	7	1	8		35	9
New Orleans.....	Straight University.....								
St. Benedict.....	St. Joseph Seminary.....	10	11	8	10	9	8	29	27
MASSACHUSETTS.									
Newton.....	Mount Ida School.....								
MICHIGAN.									
Detroit.....	Detroit Junior College.....								
Do.....	Martindale Normal.....								
Grand Rapids.....	Grand Rapids Junior College.....								
MINNESOTA.									
Cloquet.....	Cloquet Junior College.....								
Fairbank.....	Fairbank High School.....			1				1	
Hibbing.....	Hibbing Junior College.....								
Jackson.....	Jackson Junior College.....								
Minneapolis.....	Stanley College.....								
Rochester.....	Rochester Junior College.....			12			7	12	7

THE JUNIOR COLLEGE.

Number of graduates of junior colleges for the years 1915-1917; also number continuing work in higher institutions—Continued.

Location.	Institution.	Kind.	Control.	Years.						Total gradu-ates.	Total contin-uing.	
				Graduates.			Continuing.					
				1915	1916	1917	1915	1916	1917			
MISSISSIPPI.												
Holly Springs.....	Mississippi Synodical College.....	Women.....	Private.....	4	10	10	1	1	2	24	4	
Vicksburg.....	All Saints College.....	do.....	do.....	1	1	3				5	0	
MISSOURI.												
Columbia.....	Christian College.....	Women.....	Private.....	9	11	21	5	6	9	41	20	
Do.....	Stephens College.....	do.....	do.....	37	47	67	20	17	11	151	43	
Concordia.....	St. Paul's College.....	Men.....	do.....	25	23	20	25	23	19	68	67	
Fayette.....	Howard-Payne College.....	Women.....	do.....									
Fulton.....	Synodical College.....	do.....	do.....	7	7	11	do.	2	3	25	5	
Do.....	William Woods College.....	do.....	do.....				do.					
Glasgow.....	Pritchett College.....	do.....	do.....				do.					
Kansas City.....	Kansas City Polytechnic.....	Coeducation	Public.....		8	43		7	25	51	32	
Mexico.....	Hardin College.....	Women.....	Private.....									
Nevada.....	Cortey College.....	do.....	do.....	5	7	3	1	3		16	4	
St. Charles.....	Lindenwood College.....	do.....	do.....	7	10	14	5	5	7	31	17	
St. Joseph.....	St. Joseph Junior College.....	Coeducation	Public.....									
St. Louis.....	Forest Park College.....	Women.....	Private.....									
NORTH CAROLINA.												
Lenoir.....	Davenport College.....	Women.....	Private.....	14	18	17	2	1	0	49	3	
Louisburg.....	Louisburg Female College.....	do.....	do.....	11	17	19	2	2	3	47	7	
Weaverville.....	Weaver College.....	Coeducation	do.....		18	11				26		
OHIO.												
Urbana.....	Urbana University School.....	Coeducation	Private.....									
OKLAHOMA.												
Chickasha.....	Oklahoma College.....	Women.....	Private.....									
PENNSYLVANIA.												
Bryn Athyn.....	Academy of New Church.....	Coeducation	Private.....	2	2	6				10	6	
Reading.....	Schuylkill Seminary.....	do.....	do.....					2	4			

TENNESSEE.		Memphis Conference Institute. Jackson. Madisonville. Fiskeville. Martin College. Private. Coeducation Women	5 5 7 18 6	5 18 6	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1 8 2	5 1 10	1
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THE JUNIOR COLLEGE.

Appendix M.—ENROLLMENT IN JUNIOR COLLEGES.

Enrollment in junior colleges for the years 1914-1917.

[illegible]

[illegible]

THE JUNIOR COLLEGE.

Enrollment in junior colleges for the years 1914-1917—Continued.

Location.	Institution.	Kind.	Control.	Academy.		1914-15		1915-16		1916-17	
				1914-15	1915-16	Fresh-men.	Sopho-more.	Fresh-men.	Sopho-more.	Fresh-men.	Sopho-more.
MISSISSIPPI.	Mississippi Synodical College.....	Women.....	Private.....	53	47	16	4	22	10	28	10
	Vicksburg.....	do.....	do.....	60	60	3	1	4	1	5	3
MISSOURI.	Christian College.....	Women.....	Private.....	63	60	53	37	79	47	78	68
	St. Paul's College.....	Men.....	do.....	28	32	25	26	22	23	28	20
Columbia.	Howard-Payne College.....	Women.....	do.....	113	100	98	51	79	47	78	68
	Synodical College.....	do.....	do.....	34	29	13	6	14	8	22	11
Glasgow.	William Woods College.....	do.....	do.....	34	29	13	6	14	8	22	11
	Pritchett College.....	do.....	do.....	34	29	13	6	14	8	22	11
Kansas City.	Kansas City Polytechnic Institute.....	Coeducation	Public.....	192	213	213	213	192	213	295	66
	Hardin College.....	Women.....	Private.....	62	68	20	10	30	15	40	20
Nevada.	Cottley College.....	do.....	do.....	89	84	48	7	75	10	85	14
	Lindenwood College.....	do.....	do.....	89	84	48	7	75	10	85	14
St. Charles.	St. Joseph Junior College.....	Coeducation	Public.....	75	75	40	20	60	10	45	10
	Forest Park College.....	Women.....	Private.....	75	75	40	20	60	10	45	10
NORTH CAROLINA.	Devenport College.....	Women.....	Private.....	60	61	20	26	24	28	22	29
	Louisburg Female College.....	do.....	do.....	83	61	20	17	20	11	16	14
Weaverville.	Weaver College.....	Coeducation	do.....	83	61	20	17	20	11	31	18
	Urban University School.....	Coeducation	Private.....	83	20	8	8	5	2	7	1
OHIO.	Urban University School.....	Coeducation	Private.....	83	20	8	8	5	2	7	1
	Oklahoma College.....	Women.....	Private.....	83	20	8	8	5	2	7	1
OKLAHOMA.	Oklahoma College.....	Women.....	Private.....	83	20	8	8	5	2	7	1
	Academy of New Church.....	Coeducation	Private.....	61	52	7	2	8	3	11	6
PENNsylvania.	Schuylkill Seminary.....	do.....	do.....	61	52	7	2	8	3	11	6
	Bryn Athyn.....	Coeducation	Private.....	61	52	7	2	8	3	11	6
Reading.	Schuylkill Seminary.....	do.....	do.....	61	52	7	2	8	3	11	6
	Schuylkill Seminary.....	do.....	do.....	61	52	7	2	8	3	11	6

TENNESSEE.		Women	76	14	5	19	10	18	28	11	5	15
Jackson	Memphis Conference Institute	Coeducation	86	90	62	76	92	14	5	19	10	18
Madisonville	Hixson College	Women	62	62	62	62	62	62	62	62	62	62
Pulaski	Martin College	Women	62	62	62	62	62	62	62	62	62	62
TEXAS.												
Ablene	Ablene Christian College	Coeducation	112	115	125	56	24	80	66	68	48	114
Clarendon	Clarendon College	do.	112	115	125	56	24	80	66	68	48	114
Greenville	Wesley College	do.	112	115	125	56	24	80	66	68	48	114
Marshall	College of Marshall	do.	112	115	125	56	24	80	66	68	48	114
Meridian	Meridian Junior College	do.	155	175	200	15	5	20	30	40	85	125
Midland	Midland College	do.	155	175	200	15	5	20	30	40	85	125
Sherman	Carr Burdette College	Women	30	32	45	10	4	14	14	3	17	29
Do.	North Texas College	do.	30	32	45	10	4	14	14	3	17	29
Stamford	Stamford College	Coeducation	70	120	150	30	6	36	35	12	47	40
Stephenville	John Tarleton Agricultural College	do.	70	120	150	30	6	36	35	12	47	40
Teague	Westminster College	Public	60	60	60	20	15	35	25	15	40	21
Terrell	Texas Military College	Private	25	25	27	20	10	30	25	12	37	40
Thorpe	Thorpe Spring Christian College	do.	75	80	100	20	10	30	25	12	37	40
Waco	Paul Quinn College	do.	75	80	100	20	10	30	25	12	37	40
VIRGINIA.												
Arlington	Stonehill Jackson College	Women	42	63	52	32	30	62	32	29	49	29
Bristol	Sullivan College	do.	42	63	52	32	30	62	32	29	49	29
Daleville	Virginia Intermont College	Coeducation	100	110	115	10	14	24	12	6	18	19
Danville	Daleville College	Women	44	47	50	9	5	14	21	5	26	30
Marion	Auerett College	do.	44	47	50	9	5	14	21	5	26	30
Petersburg	Marion College	do.	44	47	50	9	5	14	21	5	26	30
Roanoke	Southern College	Women	85	86	54	43	43	43	43	43	43	49
WASHINGTON.												
Everett	Columbia Lutheran	Coeducation	85	85	83	4	4	4	4	4	5	8
Do.	Everett High School	do.	964	964	993	43	43	43	43	43	59	59
WISCONSIN.												
Milwaukee	Concordia College	Men	151	146	110	28	23	51	32	23	55	70
Mount Calvary	St. Lawrence College	do.	83	84	95	14	23	37	26	12	38	23
Prairie du Chien	St. Mary's College	Women	65	70	75	5	5	5	3	2	5	10

Appendix N.

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